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ABSTRACT

The administration, purpose, and design of student financial aid programs are examined with emphasis on assuring greater access to higher education, student persistence, and providing students with incentives for performing well academically. After a brief history of financial aid and a review of selected studies on persistence, the sampling and data collection procedures are described. A profile of students 2 years after matriculation in college is provided, including demographic characteristics, enrollment behavior, residence, experience in college, work, and financial aid. The characteristics of students with different patterns of persistence are discussed in terms of religion and political orientation, parental income and education, degree plans, values and attitudes, financial experience, work experience, and reasons for leaving school. A separate chapter gives an overview of the financial aid environment in American colleges and universities today. The last two chapters, utilizing a multiple regression analysis, assess the impact of personal, environmental, and financial variables on persistence and withdrawal among white and minority students. Implications for future policies are addressed. Among the several suggestions are the following: more sources of information about student financial aid should be made available to students; loans, especially large ones, are the worst possible form of aid to offer low-income and minority students; and the government should consider expanding grant and work-study programs. Appendices include: survey instruments; creation of financial aid variables; development of persistence categories; a verification study of financial aid data reported by students; and variables used in regression analyses. (LC)

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STUDENT FINANCIAL AID
AND
PERSISTENCE IN COLLEGE

by
Helen S. Astin and Patricia H. Cross
with the assistance of
Oscar Porter

Higher Education Research Institute

September, 1979

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CHAPTER 1

INTRODUCTION

Student financial aid programs have recently provoked widespread public controversy at both the state and the national level. Debate has focused on a number of issues: How much money should be appropriated? How should available resources be allocated among the different types of aid (grants, loans, and work-study)? Should aid be administered through the institutions, or should it be given directly to the students? Should aid be based primarily on financial need and if so, how is financial need to be defined? Or should other criteria (for example, aptitude, the need to encourage certain kinds of students) be used? How should various forms of aid be packaged for individual students?

Such questions are difficult to resolve because the purposes of student financial aid programs are often not explicit. Among the many possible purposes, the most common are to give students greater access to higher education, to assure that students complete their studies, to provide students with an incentive for performing well academically, to reward merit, to influence student choice of postsecondary institution, and to redistribute wealth.

This chapter provides a brief history of financial aid and reviews selected studies on persistence in college.

Financial Aid: A Historical Perspective

In 1643 a one hundred pound scholarship was given to a deserving student, the first instance in the nation's history of financial assistance to students for attendance at an institution of higher education; today, federally funded student assistance programs alone total over three billion dollars (Keene, Adams and King, 1975). Direct financial aid programs began in the 1930s, and the newest and largest program came into existence as recently as 1972. As the federal government and, to a lesser degree, the state governments have become more involved in student financial assistance, both the dollars expended and the numbers of students aided have increased dramatically.

New York was the first state to establish a scholarship program (in 1912), and Wisconsin the first to establish a student loan program (in 1933). At about the same time the federal government also became involved in aiding students directly: In 1933 the National Emergency Relief Administration created the National Youth Administration's College Work-Study Program, which gave low-income youth who wanted to go to college a chance to work in the community or the institution. During its nine-year existence, this program aided 600,000 students. The federal government expanded its assistance to students in 1935 with the Social Security Act's provision to aid qualified full-time college students.

World War II brought about further expansion: The Student War Loan Program (1942-1944) aided 11,000 students seeking degrees in technical or professional fields, and the Serviceman's Readjustment Act in 1944 (the GI Bill) provided aid to 2.2 million veterans (U.S. House of

Representatives, 1958).

Access to higher education was no longer a problem for veterans. But what of other groups of young people who were talented but poor? In the years following World War II, the push for equal access began. In 1946, President Truman established the President's Commission on Higher Education for Democracy whose stated purpose was to reassess the objectives, goals, methods, and social roles of higher education in the United States.

By 1949 the nation had 1,808 colleges and universities, and over half of them offered some kind of financial aid to students (West, 1963). As more students competed for the available scholarship dollars, it became necessary to have a clearinghouse which could establish uniform procedures for determining a student's ability to pay for his/her educational expenses. Thus in 1954 the College Scholarship Service was established (College Entrance Examination Board, 1975).

By 1955, 1,560 colleges and universities participated in some type of financial assistance program. Approximately 250,000 students were aided by scholarships, grants, and work programs in the amount of $66 million in each program area. In addition, 77,000 students received $12 million in student loan monies (Moon, 1963). The number of large scholarships made available during the mid-1950s increased greatly with the development of two scholarship programs: the National Merit Scholarship Corporation, founded jointly by the Carnegie and Ford Foundations in 1955, and the National Scholarship Act, passed in 1956. The latter declared that it was in the national interest to develop the talents of

America's youth and asked the states to submit scholarship proposals which, if approved, would receive partial funding from the federal government (U.S. House of Representatives, 1958).

With the Soviet Union's launching of Sputnik, the need to step up the nation's technological development became apparent. Thus, Title II of the 1958 National Defense Education Act established the National Defense Student Loan Program. The loans were to subsidize the growth of higher education and to demonstrate the government's willingness to invest in human capital (Hartman, 1971).

The scholarship, loan, and work components of student financial assistance for higher education was $144 million in the mid-1950s; by 1960 the total had climbed to $212 million (Moon, 1963). The new involvement of the federal government to meet the increased demands for aid was coupled with an expansion of state-sponsored programs--twenty states initiated scholarship programs in 1961 alone (West, 1963)--and the development of the United States Aid Fund, sponsored by private business (Alterman, 1973).

The War on Poverty and the Great Society of Presidents Kennedy and Johnson encouraged the establishment of a national scholarship program for those unable to pursue postsecondary education without such assistance. President Johnson signed the Higher Education Act of 1965 establishing the Educational Opportunity Grant (EOG) Program and the Guaranteed Student Loan Program (GSLP). The College Work-Study (CWS) Program was transferred into the Department of Health, Education and Welfare, and the National Defense Student Loan (NDSL) Program was amended and renamed the National

Direct Student Loan Program by the Higher Education Amendments of 1972 (Alterman, 1973).

Once established, these programs have continued to grow both in dollars appropriated and in students aided. To illustrate the growth in expenditures: In the 1966 fiscal year, SEOG spent $38 million, and CWS spent $56 million; by fiscal 1970, these figures had risen to $164 million and $152 million, respectively (Roark, 1977).

The Higher Education Amendments of 1972 authorized the Basic Educational Opportunity Grant (BEOG) Program. It was conceived as a completely federally sponsored and administered program: The federal government or its authorized agent would have sole responsibility for determining the eligibility of the students who applied for grants, and eligible higher education institutions would merely disburse the funds. This type of delivery system served several objectives: to increase equal opportunity by expanding the student's access and choice, to encourage the free flow of students in the academic marketplace, and to protect the diversity of American higher education (Hartman, 1971). This program began by providing $122 million to 176,000 students. By the 1977-78 academic year, it was providing $1.5 **billion** to close to two million students (Roark, 1977).

Having developed programs to extend opportunity and choice to those unable to meet the costs of higher education, the federal government is now widening its approach to student aid: The Middle-Income Student Assistance Act, signed by President Carter in November 1978, will effectively double the number of students aided by the current programs. The GSLP will remove all income limitations, and the BEOG will be open to students from families with yearly incomes up to $25,000 (Student Aid News, 1979).

Financial Aid and Persistence in College

The use of financial aid to enhance student persistence in college is the focus of the present study. The premise here is that entry into postsecondary education is not enough. Students must persist for a reasonable amount of time beyond initial entry so that they can (1) avail themselves of what the institution has to offer, (2) decide whether these services will be useful to them, and (3) complete desired programs of study.

Student aid programs should be structured to achieve that goal. This study seeks to understand the role of financial aid in persistence over the first two years of postsecondary education. As a first step, a summary of what is known about the determinants of persistence is in order.

Pantages and Creedon's Review

In their review of twenty-five years of attrition studies (from 1950 to 1975) in higher education, Pantages and Creedon (1978) offer a methodological critique of the research, discuss the operational and theoretical difficulties resulting from inconsistently defined target groups, present Tinto's (1975) theoretical model, and suggest revisions in that model. They also review the variables associated with persistence and the reasons students give for withdrawal from college, describe the withdrawal procedure, and discuss programs to reduce attrition. Their review includes a bibliography.

When findings on the effects of certain variables differ from study to study, Pantages and Creedon tend to minimize the predictive usefulness of such variables or to consign them to a realm they call "preventative guidelines." In addition, they point out that, even though distinctions should be made among whose who permanently leave higher education, those who transfer from one institution to another, and those who leave higher education only temporarily ("stop out"), many researchers fail to make such distinctions. Thus, they strongly mandate that student status be clearly defined and, along with Tinto (1975), urge that research reflect a conceptual framework "if we are to understand the processes that lead to attrition as contrasted to merely identifying its correlates" (Pantages & Creedon, 1978, p. 53). They further recommend the use of longitudinal over cross-sectional designs and of multivariate analysis to isolate the independent effects of different factors.

According to Pantages and Creedon, research has invariably shown that the significant predictors of persistence in college are high school grade-point average. high school class rank, and scores on standardized academic aptitude measures. It is generally agreed that students who withdraw from higher education cite academic and financial difficulties as their primary reasons. Since seven in ten dropouts eventually re-enroll in college, however, these difficulties do not seem to contribute to permanent withdrawal. There is consensus that students are more likely to persist at four-year colleges than at two-year colleges, especially if they live on campus; and that high-prestige colleges have the lowest attrition rates. Receiving a grant or a scholarship rather than a loan significantly enhances persistence. Study habits, along with supportive peer and parental relations, play some role in determining the likelihood of the student's persisting to graduation. But the effects of motivational and personality factors on persistence have not been clearly identified because of the difficulties involved in measuring such variables.

When scholastic, environmental, and institutional variables are accounted for, women are more likely to drop out for personal reasons, while men drop out for curricular and/or academic reasons.

Although Pantages and Creedon conclude that "attrition is the result of an extremely intricate interplay among a multitude of variables" (1978, p. 94), they find the "college fit" or "needs-press model" to offer the most useful approach to the study of persistence. Research within the last fifteen years that has incorporated environmental assessment techniques supports the notion that the images of different higher education institutions appeal to different types of students and that "the extent to which the student can meet the demands of the college and derive satisfaction from doing so is the degree to which the student may be expected to persist at college" (1978, p. 94).

Astin's Study

Alexander Astin (1975) conducted a longitudinal study of persistence in college, based on data collected from 1968 freshmen who were followed up in 1972. The purpose of the study was to predict "dropout proneness" and to examine the impact of financial aid, employment, place of residence, and college characteristics. He found that the freshmen most likely to persist in college are those who have good high school grades, plan to get postgraduate degrees, come from Jewish (rather than Protestant) backgrounds, and give their religious preference as Jewish (rather than saying they have no religious preference). Other predictors of persistence are good study habits, high expectations about academic performance in college, and well-educated parents. Married men (but single women) are more likely to persist. For black students, cigarette smoking is among the strongest predictors of dropping out. Less powerful but still significant predictors of college persistence are making high scores on college admissions tests, being Oriental, being a nonsmoker, and growing up in a moderate-sized community.

After entering characteristics are taken into account, getting good grades in college is the most important predictor of persistence. Other experiential factors which increase the student's likelihood of completing college are staying single (for women); not having children (for men and women); living in a college dormitory rather than at home; working part-time rather than full-time; and participating in extracurricular activities such as ROTC, sports, and fraternities or sororities. Whereas men and women who get a scholarship or grant or receive some parental support are more likely to complete college, men who get loans are less likely to do so.

Astin found further that transferring from one four-year college to another as well as attending a public two-year college, seems to reduce persistence. Students are more likely to persist at private universities, at public four-year colleges in the northern or southern states, at moderately selective or religiously affiliated colleges, and at colleges with students of similar backgrounds rather than with similar ability.

Other Studies

Other current research continues to indicate that the student's past academic record, scores on ability measures, and college grades strongly affect persistence (Pedrini & Pedrini, 1976; Pedrini & Pedrini, 1977).

The importance of the fit between the student and the college, particularly in terms of the student's identification with the institution, is substantiated by Cope and Hannah (1975). Terenzini and Pascarella (1977), in a study of freshmen at Syracuse University, found that the lack of social and academic integration were significantly and independently related to a freshman's dropping out voluntarily. Their data further suggest that informal interaction with faculty contributes strongly to the student's academic and social integration. Subsequently, employing a longitudinal design to investigate the patterns of such interactions, Pascarella and Terenzini found that, after the student's gender, academic aptitude, and personality characteristics were taken into account, persisters were much more likely to have frequent interactions with faculty members than were voluntary withdrawers. The type of interaction which most enhanced persistence was that which focused on intellectual or course-related concerns.

Some of the literature suggests that the community college is fulfilling a salvage function. Lee (1976) cites academic difficulty due to lack of adjustment at four-year institutions as a cause of "reverse transfer"; that is, the student's leaving the four-year institution to enroll in a community college. Gragg and Stroud (1977) identified a similar pool of dropouts from four-year colleges who transferred to community colleges and succeeded there.

Nickens (1976) reports that, when 976 students at fifteen Florida community colleges (freshmen in 1970) were asked about their original academic goals, almost 60 percent said they had achieved their original goals, and almost one-third said they were currently pursuing those goals or planned to in the future. This finding indicates that definitions of dropout should incorporate the student's own aspirations. Further, the literature suggests that leaving college temporarily or permanently may have substantial positive results (Cope & Hannah, 1975; Astin, 1975; Kesselman, 1976; Valine, 1976).

Financial aid and its impact on persistence have been examined in a number of studies. Financial aid enables access and gives students a greater number of options when it comes to choosing an institution (Fife, 1975; Corwin & Kent, 1977; Leslie, 1978; Astin, 1978). In 1975 25 percent of all college students relied on federal financial aid (Atelsek & Gomberg, 1975), and in 1976-77 nearly two million students participated in at least one type of financial aid program (Atelsek & Gomberg, 1977).

Pantages and Creedon (1978) report that studies of the role of financial factors in attrition yield equivocal results, except that grants or scholarships (as opposed to loans) increase the likelihood of persistence in college. This finding is substantiated by Astin (1975), who also found that any form of financial aid is generally most effective when it is not packaged with another form and that benefits appear to differ according to race, sex, and income level. Substantial support from parents (for dependent students) or from spouse (for married students) generally enhances persistence. However, women from high-income families who receive parental support are more likely to drop out, as are married students whose spouse can provide only minor help. The amount of grant support is a factor in persistence (especially for blacks), and grants or scholarships are most beneficial to women from low-income families and to men from middle-income families. Reliance on loans is associated with increased persistence for blacks attending white colleges but with decreased persistence for men of all income groups; depending on the amount of loan support and on parental income, the effects of loans on the persistence of women vary. Participation in work-study programs (especially when the employment is on-campus) increases the likelihood that the student will persist. The most consistent positive impact of such programs is on middle-income students, though they also appear especially beneficial for women and blacks. But that beneficial impact declines when work-study support is combined in a package with grants or small loans, especially among low-income students. Support from ROTC is strongly associated with increased student persistence, but reliance on savings or on support from the GI Bill seems to lessen the student's chances of completing college.

Organization of the Report

The chapters following this introductory section include one (chapter 2) on methodology in which the sampling and data collection procedures are described. Chapter 3 provides a profile of students two years after matriculation in college; Chapter 4 describes the characteristics of students with different patterns of persistence; Chapter 5 gives an overview of the financial age environment in American colleges and universities today. The last two chapters utilizing a multiple regression analysis, assess the impact of personal, environmental. and financial variables on student persistence in college. The report concludes with a chapter that summarizes the findings, draws conclusions, and discusses some policy implications.

CHAPTER 2

METHODOLOGY

This chapter describes first the sample and the data collection procedures and then the questionnaire design, with special emphasis on the rationale for item inclusion and the types of independent variables used in the study, as well as on the development of the dependent variables. It concludes with a discussion of weighting prodecures.

The Sample

The sample was drawn from students who had enrolled for the first time in fall 1975 in one of the 325 institutions participating in the Cooperative Institutional Research Program (CIRP).[1] Further, 2,854 students (a 50 percent random sample) enrolling in proprietary schools in fall 1975 were added to the follow-up sample.

The sampling design was intended to produce a sample that would include:

- as many minority students as possible;

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[1] Forty-one institutions from the original 366 CIRP institutions were dropped because SAT/ACT scores or addresses for their students were not available. We thought it important to capitalize on available SAT/ACT scores as potentially significant predictors of persistence in college. For the names of institutions in the program, see A. W. Astin et al., The American Freshman: National Norms for Fall 1975, 1975.

- enough students from a limited number of institutions to allow for the creation of environmental variables;
- a large proportion of students for whom SAT or ACT scores were available (a small group of students without test scores for comparison were also selected); and
- a larger proportion of low-income white students than are actually present in the population.

To meet the first objective, all Chicanos, American Indians, Puerto Ricans, and Asian-Americans in the 1975 data base were surveyed.[2] To meet the second, 100 institutions were selected according to a random stratified design parallel to that used in the CIRP (see Table 1); predominantly black institutions were not included among the 100 institutions. All blacks with SAT/ACT scores in the CIRP institutional population (N=325), as well as all blacks in the 100 institutions, were selected. In addition, one in every five blacks who had not enrolled in the 100 institutions or who lacked test scores was chosen (see Figure 1). Other minority students attending these hundred institutions were also a part of this population.

To meet the fourth objective--having a large pool of low-income white students--we sampled whites from the 100 institutions as follows: Among students from families with incomes below $10,000, we selected nine out of ten with test scores and one out of seven without test scores. Among students from families with incomes above $10,000, we selected one out of four with test scores and one out of thirty-three without test scores.

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[2] Because of their larger numbers in the population, not all blacks were surveyed.

The final sample comprised 40,525 students. Table 2 shows the Ns for the various subpopulations as well as their response rates and their proportionate representation in the final sample.

Data Collection Procedures

Follow-up questionnaires were sent by first-class mail to each student's home address during the second week of September 1977. A note on the envelope requested that the questionnaire be forwarded if the student had already returned to school. During the third week of October, students who had not responded were sent a second questionnaire, along with a cover letter explaining the purposes of the study and encouraging participation. (See Appendix A for copies of the questionnaire and all cover letters.) In an effort to reach students at home during the Thanksgiving recess, a third wave was mailed out on November 18.

A total of 16,657 students returned usable questionnaires. After the names of 4,052 students whose questionnaires were returned as nondeliverable were removed from the sample, the overall response rate was 45.7 percent. Table 2 shows the response rates of each of the subpopulations in the sample and their proportionate representation in the final sample.

Questionnaire Design

The follow-up questionnaire[3] was designed to collect information that would enable us to analyze how the various types of financial aid and the various "packages" affect the dropout and persistence rates of subpopulations of students (e.g., women, blacks, low-income students) attending different types of institutions. It covered five major areas:

- current enrollment status and academic progress;
- financial status and financial aid;
- academic performance, extracurricular activities, work experiences, and college experiences;
- personality characteristics and motivation; and
- career aspirations and degree plans.

In addition, three items dealt with reasons for a student's dropping out or transferring and with the timing of such decisions.

Rationale for Item Inclusion

The key concepts in this study, and the dependent variables in the analyses, are persistence and attrition, terms which have been variously defined depending on the goals of a particular study or the limitations of a particular data base. If a study of the impact of financial aid on persistence and attrition is to provide a basis for reexamining federal, state, and institutional aid programs, then the definition of these terms must be appropriate to the national scope of the issues and must be acceptable to policy-makers and researchers alike.

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[3] The initial questionnaire was administered to these students in 1975 as part of the Cooperative Institutional Research Program.

The major problem in defining persistence and attrition is that any classification of students as dropouts is necessarily uncertain and ephemeral, since theoretically dropouts can return to college and complete the degree at any point in their lives. Yesterday's dropout may be today's college student and tomorrow's baccalaureate-recipient. On what basis, then, should a student be labeled a dropout?

This study tried to handle this problem by identifying four main groups: those who clearly were not dropouts (full-time persisters); those who clearly were dropouts, at least within the time-frame of the study (withdrawals); those who had interrupted their undergraduate education but had returned to school by the fall of 1977 (stopouts); and those who had moved from full-time to part-time or from part-time to full-time status (erratic persisters).

Two sets of independent variables were drawn from items on the follow-up questionnaire: financial aid variables and "control" variables. The financial aid variables were of prime importance in this study, and more will be said about them later.

The second set, the control variables, represent student characteristics and experiences, as well as college environmental characteristics, that may affect persistence. The control variables were included in the longitudinal analysis for two main reasons. First, their inclusion helps to reduce the amount of error (variance unaccounted for) in the dependent variables (persistence). The greater the amount of variance, the less sensitive the tests of the impact of financial aid, and the less reliance can be placed in the findings. For instance, if we were to find that financial aid seems to have only weak effects but that there is a great deal of unaccounted-for variance in persistence, then the possibility would arise that the analyses had failed to reveal the actual importance of financial aid for a number of technical reasons such as error of measurement or shortcomings in the particular method of analysis used. The second reason for including the control variables is to gain as full an understanding as possible of all the factors that affect persistence; such an understanding may enable us to suggest possible modifications in the administration of financial aid or even to recommend that the government give less emphasis to financial aid programs but increase its support to institutions or to other types of student services that may have a more direct impact on persistence.

The control variables are of two types: mediator and interactive. The former mediate the impact of financial aid on persistence and thus constitute a middle link in the causal chain between financial aid and persistence; they are affected by financial aid and, in turn, they affect persistence. For example,amount of work as a moderator variable can affect involvement in the institution which in turn can affect persistence. Interactive variables condition the effects of financial aid on persistence: The impact of financial aid is different at different levels of the variable. Such variables are especially important in identifying the conditions under which financial aid is most effective in reducing attrition. An example of such an interaction is amount of aid by ability level.

In short, items were included on the follow-up questionnaire because of their known or hypothesized relation to financial aid and to student persistence. The rest of this section describes the independent variables in more detail.

Financial Aid Variables

The independent variables which deal with financial aid include measures of the type and amount of financial aid offered to and received by students. Data for these measures came from responses to the 1975 CIRP freshman questionnaire and the 1977 follow-up questionnaire. We used item #18 on the 1975 questionnaire to determine whether the student had received a single type of aid or a package. The nature of the package, and the actual amounts involved, were also identified (e.g., large grant, loan, work-study). (For a detailed description of the development of the packaging variables, see Appendix B.)

Two additional items were used to probe related areas. The 1975 CIRP freshman questionnaire contained an item asking students about the degree of concern they felt over their ability to finance their college education. In his study of persistence, Astin (1975) found that the student's concern over finances carried substantial weight in the regressions for two groups: white women and blacks attending black colleges. Thus, it is important that we control for degree of financial concern in order to ascertain the direct impact of financial aid on persistence. The second item, from the 1977 follow-up questionnaire, consisted of a series of statements related to the respondent's financial situation: e.g., "My parents have a low income and cannot help with my college expenses." (For the other statements, see item #8 of the follow-up questionnaire, Appendix A.) We believed that students who have major expenses and financial responsibilities may be under a great deal of pressure, which could contribute to their decision to withdraw.

Personal and Motivational Variables

Personal and motivational variables constitute one type of control variable in this study. For instance, degree aspirations reflect the student's commitment to educational goals. According to Cope and Hannah (1975), personal commitment to an academic goal is one of the most important predictors of persistence. Astin (1975) reports that students aspiring to a doctorate or a professional degree are less likely to drop out than are students with lower degree aspirations. Including items related to degree aspirations allows us to answer the question, Are students with high degree aspirations more motivated to persist? In addition, these variables were used to create the dependent variable of persistence. That is, changes in degree aspirations or fulfillment of original degree plans provided information in creating the dependent variable, whereas level of degree aspiration was used an an independent variable denoting educational commitment or academic motivation.

Another personal variable found by a number of studies (Astin, 1975; Bayer, 1969) to predict educational outcomes is marital status. For women, getting married while in college is one of the most important determinants of dropping out; being married at the time of college entry increases a woman's chances of dropping out by 11 percent and decreases a man's chances by 8 percent. Moreover, marital status may have direct effects on financial status. For instance, Astin (1975) found that 55 percent of married men have wives who provide them with financial support for college. On the other hand, one would expect divorced men to carry extra financial burdens.

The other personal and motivational variables used in the analyses fall into several categories.

Involvement in College. Astin (1975) found that a number of activities and experiences that can be defined as aspects of involvement in college--e.g., participating in College Work-Study (CWS), working on campus, living on campus, joining a fraternity or sorority--affect persistence. Thus, we included in our analyses a number of variables related to involvement, not only to test their direct effects of persistence but also to determine their interaction with financial aid. For instance, any apparent effect that CWS as a form of financial aid has on persistence may disappear when the effect of involvement in college is taken into account. It is critical that we understand the mechanisms whereby financial aid affects persistence. With respect to the interactive nature of involvement, it may be that students who are deeply involved in college are also more likely to be assertive and to have some know-how about what types of aid exist and how one should go about applying for them.

On the basis of these assumptions, we included in the follow-up questionnaire an item comprising 28 statements about what the student did or felt since entering college in 1975 (see item #13 of the follow-up questionnaire, Appendix A). Most of these statements have to do with activities that indicate the student's participation in campus life (e.g., "Participated in a play or entered an art contest"; "Voted in a student election"). Other statements, subsumed under the label "psychological despondency," signify a lack of involvement in and an alienation from college life (e.g., "Felt lonely much of the time"; "Wasn't very interested in any of my courses"). Still other statements, while not necessarily reflecting involvement, nonetheless represent facts that bear on persistence (e.g., "Failed one or more courses"), measure motivation (e.g., "It is very important to me to complete my original degree plans"), or assess the student's perception of support and encouragement from important others (e.g., "Received a lot of encouragement from my family to stay in school").

Self-Concept. Comparisons of the personality characteristics of dropouts and persisters indicate that the former tend to be more impulsive, creative, nonconforming, and self-centered and less integrated (Astin, 1964; Brown, 1960; Hannah, 1971; Suezek & Alfert, 1966). To assess the extent to which self-concept is related to persistence, we included an item asking students to rate themselves on 17 personal traits (see item #20 of the follow-up questionnaire, Appendix A).

Academic Performance. College grades are directly related to persistence. Not only are dropouts likely to report relatively low grades, but also they often cite poor grades or academic underachievement as important reasons for withdrawing from college (Cope & Hannah, 1975). Astin (1975) found that undergraduate performance influences persistence directly, independent of initial variations in ability, family background, financial aid, residence, and type of institution. It was particularly important in this study that academic performance be taken into account insofar as it often interacts with financial aid: Some types of aid can be awarded or renewed only if the student maintains respectable academic standing. Therefore, one item on the follow-up questionnaire (#5) asked respondents to indicate their grade average during the last two years.

Residence. A number of earlier studies examined the effects of residence while attending college on persistence. Thus, Iffert (1967) found that students who live on campus have significantly better persistence records than those who live with parents, relatives, or friends. Similarly, Astin (1975) concluded that living on campus has a strong positive effect on persistence. In addition, he found that, when students live in fraternities or sororities rather than in college dorms, their chances of dropping out are reduced by 6 percent. Men benefit more from living in college dorms or other campus housing rather than at home, whereas women who do not live in dorms benefit more from living at home than in a private room or apartment.

Because of these connections between residence and persistence, it was necessary to control for the former before trying to ascertain the direct effects of financial aid. Thus, the follow-up questionnaire contained an item (#7) asking respondents to indicate their living arrangements during the previous two years (1975-76, 1976-77). Each type of residence was scored as a dummy variable.

The student's living arrangements are also related to involvement with college and to college costs. Our multivariate analyses permitted us to assess the independent contribution of place of residence to persistence as well as its interaction effects with involvement and costs.

Satisfaction with College and College Services. Satisfaction with college experiences as a whole and with different aspects of the college experience not only affects persistence directly (Pervin & Rubin, 1967) but also may act as a moderator variable. That is, the type and amount of aid that a student receives may affect his/her satisfaction with the college experience either positively or negatively. Therefore, the follow-up questionnaire included an item (#14) asking respondents to indicate whether they were satisfied with various college experiences (e.g., academic advisement, health services, course work).

Work Experiences. Astin (1975) reports that having a job usually increases the student's chances of completing college, but for students who work full-time, the positive effects of employment on persistence are not only lost but actually reversed. On-campus work is generally preferable to off-campus work. To enable us to identify the direct or interactive effects of employment on persistence, the follow-up questionnaire contained a number of items (#30-36) on the respondent's work experiences while in college.

College Environment

In addition to the personal and motivational characteristics, college characteristics such as enrollment size--which have been found to affect directly persistence or withdrawal from college (Cope, 1972; Kamens, 1971; Nelson, 1966)--were included in the analyses as control variables. The follow-up questionnaire contained one item (#15) comprising ten statements intended to be descriptive of the college environment as perceived by the majority of students. Two of these statements attempt to measure how competitive the institutional atmosphere is; two others assess the warmth of the college environment (or its lack), and each of the remaining items measures a separate dimension: conformity, theoretical (versus practical) emphasis; informality; athletic emphasis; social emphasis; and selectivity (or academic caliber of the students). Responses to these items were used to form environmental scales that served as possible interactive variables.

Development of the Dependent Variables

Elaborate procedures were used to create the dependent variables of persistence and attrition (see Appendix C for a detailed description). Two items from the 1975 freshman questionnaire were used, one on degree plans and one on plans to attend school as a full-time or a part-time student, as well as three items from the 1977 follow-up questionnaire: one (#1) indicating the student's enrollment status (full-time, part-time, not enrolled) for each month of the academic year in 1975-76 and 1976-77; another (#2) dealing with the student's enrollment plans for the fall of 1977; and the third (#4) showing the student's degree attainment and degree plans. Using these five items, we were able to classify all respondents as belonging to one of four criterion groups:

- full-time persisters: students who attended college on a full-time basis during the two academic years under study and who were enrolled (or planned to enroll) in the fall of 1977;
- erratic persisters: students whose attendance shifted between full time and part time but who never actually withdrew from school;
- stopouts: students who had dropped out of school at some point during the two academic years under study but who were enrolled again in the fall of 1977; and
- withdrawals: students who had dropped out of school and who had not reenrolled as of fall 1977.

Excluded from the analyses were those students who said as freshmen that they planned on no higher than an associate degree, who had completed that degree by the time of the follow-up, who had not reenrolled, and who thus may be said to have completed their education.

The categories listed above describe student behavior over the two academic years under study. In addition, we classified students as persisters or withdrawals on the basis of their behavior during the first year (1975-76).

Verification Study

It is often contended that student reports on financial matters, including financial aid, are not to be trusted. To see whether this charge had any validity, we conducted a verification study comparing student reports about the amount and type of financial aid they had received over the two years with actual financial aid records maintained by the institution. (See Appendix D for a detailed description of this study.)

In general, student reports were over 75 percent accurate, being most accurate about the type of aid received. Students tend to overestimate the amounts they receive from the BEOG program and from state grants. Whites and nonwhites did not differ noticeably in the accuracy of their reports.

Weighting Procedures

To correct for sampling and response bias, the data were weighted by a procedure that involved three major steps: the first step was designed to correct for response bias; the second step, for sampling bias in selecting students for the 1977 follow-up; and the third step, for sampling bias in the CIRP data on the 1975 entering freshmen.

First, the follow-up sample (N=40,525) was divided into three groups: (1) students with SAT/ACT scores; (2) students without SAT/ACT scores; and (3) proprietary students.[4] The first two groups were analyzed by means of a stepwise multiple regression, with responding (versus not responding) to the survey as the dependent variable. Over 100 independent variables (demographic characteristics, educational plans and aspirations, financial aid, beliefs and values, and SAT/ACT scores when available) were used in the regression analysis, a procedure which allows variables to enter the equation until no additional item is capable of producing a significant ($p < .05$) reduction in the residual sum of squares of the dependent variable. (See Tables 3 and 4 for a list of significant predictor variables.)

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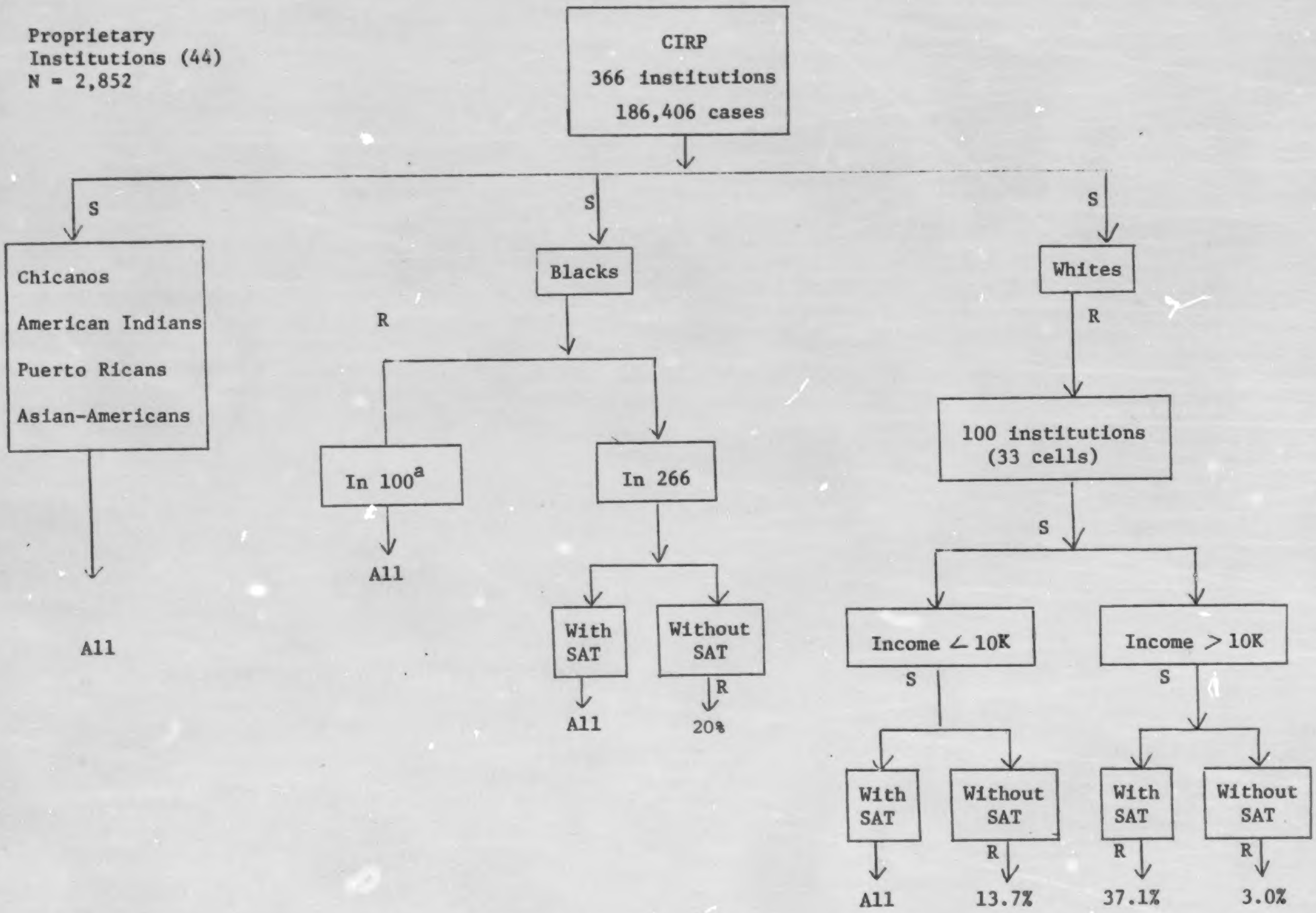
[4] It was not possible to weight the data for proprietary students since so little is known about this group.

The weights from the final step of the regression were used to compute composite scores. The corrective weight was the reciprocal of the regression composite. Weights which were either less than 1 or more than 20 were set equal to 1 or 20. These reciprocals were in turn summed and compared to the original N for each subpopulation (see Table 5). To equate the two Ns, we applied a correction factor based on the ratio of the original N to the sum of the reciprocals.

The second step was to correct for biases introduced by oversampling minority students, low-income students, and students with SAT/ACT scores. Since we took all the students for whom we had names and addresses from sampling cells 1-6 (see Table 5 for a description of the populations in these cells), no sampling bias was introduced. Cells 7-11 were corrected by multiplying each cell by the appropriate correction factor to bring it up to its original size. For instance, in cell 7, every fifth case was chosen; thus, the cases in that cell were multiplied by 5. Because the whites were drawn from a sample of 100 institutions, only data from students in these 100 institutions and in the predominantly black institutions were weighted to approximate the total population of 1975 entering freshmen.

These students were classified by sex and by the 37 stratification cells in the CIRP. The actual population figures in each of these cells were divided by the number of sample students in order to calculate a correction ratio. These correction ratios were then multiplied by the Ns already weighted to correct for response and sampling bias. The resulting weighted Ns for each of the 11 original subpopulations are listed in Table 6.

Figure 1
SAMPLING FRAME


Proprietary
Institutions (44)
N = 2,852
CIRP
366 institutions
186,406 cases
S
Chicanos
American Indians
Puerto Ricans
Asian-Americans
All
S
Blacks
R
In 100[a]
All
In 266
With SAT
All
Without SAT
R
20%
S
Whites
R
100 institutions
(33 cells)
S
Income ∠ 10K
S
With SAT
All
Without SAT
R
13.7%
Income > 10K
S
With SAT
R
37.1%
Without SAT
R
3.0%

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[a] The 100 postsecondary institutions are the same.

TABLE 1

SELECTION SCHEME FOR SAMPLE OF FOLLOW-UP INSTITUTIONS

		Number of Institutions			
Stratification Cell for Sampling		In Population	In 1975 CIRP Sample	Corrected 1975 CIRP Sample	In 1977 Follow-up
Public University					
	SATV + SATM:				
1.	Less than 1,000	59	8	8	4
2.	1,000-1,099	39	6	5	4
3.	1,100 or more	23	7	6	4
Private University					
	SATV + SATM:				
4.	Less than 1,050	26	9	8	4
5.	1,050-1,174	18	4	4	4
6.	1,175 or more	25	9	9	4
4-Year Public College					
	SATV + SATM:				
7,10.	Less than 935 and unknown	204	15	13	5
8.	935-1,024	94	10	10	5
9.	1,025 or more	43	9	9	5
4-Year Private Nonsectarian College					
	SATV + SATM:				
11,15.	Less than 950 and unknown	169	15	13	3
12.	950-1,024	70	12	11	3
13.	1,025-1,174	84	22	24	4
14.	1,175 or more	48	28	28	5
4-Year Catholic College					
	SATV + SATM:				
16,19.	Less than 950 and unknown	96	22	22	3
17.	950-1,024	72	19	17	3
18.	1,025 or more	36	11	11	3
4-Year Protestant College					
	SATV + SATM:				
20.	Less than 875	64	8	7	2
21.	875-974	102	21	18	3
22.	975-1,049	71	19	18	3
23.	1,050 or more	49	20	18	3
24.	Unknown	57	3	3	2
2-Year Public College					
	Enrollment:				
25,26.	Less than 250	208	8	7	4
27.	250-499	269	17	16	6
28.	500-999	217	6	3	3
29.	1,000 or more	190	10	9	7
2-Year Private College					
	Enrollment:				
30.	Less than 100	64	10	7	1
31.	100-249	100	15	13	1
32.	250-499	44	4	5	1
33.	500 or more	13	3	3	1
Predominantly Black Institution					
34.	Public 4-year college	36	5	5	0
35.	Private 4-year college	49	9	9	0
36,37.	Public and private 2-year college	17	2	2	0
		2656	366	341	100

TABLE 2

1977 FOLLOW-UP SAMPLE AND RATES OF RESPONSE

Sampling Population	Total N	Percent of Each Group	First Wave	Second and Third Waves	Stragglers	Total	Percent Response	Percent of Final Sample
1. Chicanos	1800	4.4	291	365	23	679	37.7	4.1
2. Indians	1021	2.5	196	231	13	440	43.1	2.6
3. Puerto Ricans	775	1.9	103	113	6	222	28.6	1.3
4. Asian-Americans	2112	5.2	482	459	34	975	46.2	5.9
5. Blacks in the 100 institutions	3845	9.5	460	739	43	1242	32.3	7.5
6. Blacks/outside 100/ SATS	7142	17.6	963	1485	92	2540	35.6	15.2
7. Blacks/outside 100/ no SATs	867	2.1	95	163	9	267	30.8	1.6
8. Whites/less than $10,000/ SATs	9232	22.8	2039	2086	98	4223	45.7	25.4
9. Whites/less than $10,000/ no SATs	857	2.1	140	170	7	317	37.0	1.9
10. Whites/more than $10,000/ SATs	9537	23.5	2458	2268	124	4850	50.9	29.1
11. Whites/more than $10,000/ no SATs	485	1.2	111	83	11	205	42.3	1.2
12. Proprietary students	2852	7.0	331	352	14	697	24.4	4.2
	40,525	100.0	7669	8514	474	16,657		100.0
nondeliverables	- 4052							
	36,473							

NOTE: After excluding the nondeliverables, response rate for the total sample was 45.7 percent.

TABLE 3

SIGNIFICANT PREDICTORS OF RESPONSE FOR STUDENTS WITH SAT/ACT SCORES

(N = 15,887; R = .25)

	Final Equation		
	Beta Weight	F Ratio	r
High school GPA	.082	64.464	.164
Financial sources of support for college: Savings	.056	45.112	.098
Sex: Female	.092	125.681	.072
SAT/ACT score	.099	69.686	.154
Social values: Marijuana should be legalized	-.056	49.541	-.072
Important life goal: Becoming an authority in my field	-.032	16.241	-.051
Financial sources of support for college: State scholarship or grant	.036	20.753	.061
Best guess of future behavior: Make at least a "B" average	-.030	11.891	.022
Sampling cell: Whites with parental incomes greater than $10,000	.033	14.174	.085
Religion: Jewish	-.028	12.229	-.016
Financial sources of support for college: College work-study	.027	11.831	.024
Important life goal: Writing original works	-.021	6.686	-.019
Sampling cell: Blacks in the 100 institutions	-.035	17.106	-.055
Financial sources of support for college: Part-time or summer work	.024	7.876	.078
Best guess of future behavior: Drop out permanently	-.030	13.948	-.026
Best guess of future behavior: Fail one or more courses	.021	6.144	-.002
Father's education	-.025	8.477	.035
Sampling cell: Puerto Ricans	-.024	9.133	-.033
Probable major: Physical sciences	.018	5.221	.038
Enrollment status: Full-time	.018	5.478	.033
Sampling cell: Blacks not in 100 institutions	-.027	7.475	-.093
Father's occupation: Business	-.017	4.713	.007
Probable major: Social sciences	-.019	5.784	-.024
Best guess of future behavior: Change major field	.016	4.003	.031
Important life goals: Raising a family	-.018	5.164	-.022
Probable career: Artist/performer	-.017	4.393	-.021
Financial sources of support for college: Full-time work	-.016	4.294	-.020

TABLE 4

SIGNIFICANT PREDICTORS OF RESPONSE FOR STUDENTS WITHOUT SAT/ACT SCORES

(N = 5,899; R = .24)

	Final Equation		
Predictor	Beta Weight	F Ratio	r
High school grades	.106	56.240	.161
Sex: Female	.088	41.787	.108
Age	-.057	18.302	-.110
Financial sources of support for college: Savings	.043	9.843	.084
High school program: Not college preparatory	-.046	11.834	-.096
Best guess of future behavior: Drop out permanently	-.044	11.825	-.063
Best guess of future behavior: Graduate with honors	-.040	9.340	-.022
Probable major: Engineering	.037	7.847	.036
Financial sources of support for college: Part-time or summer work	.037	6.985	.080
Father's occupation: Engineer	.038	8.832	.053
Financial sources of support for college: State scholarship or grant	.034	6.710	.072
Important life goal: Being very well-off financially	-.034	6.862	-.045
Probable major: Education	.033	6.539	.035
Father's occupation: Unemployed	.027	4.551	.017
Probable career: Research scientist	.027	4.573	.042
Probable major: Humanities	-.024	3.669	-.016
Probable career: Nurse	.024	3.516	.038

TABLE 5

PROCEDURE TO CORRECT FOR RESPONSE BIAS

Subpopulation	Sample N	Sum of Reciprocals of Regression Composites	Correction Ratios[a]
Chicanos	1800	1776	1.013245
Indians	1021	1042	0.979667
Puerto Ricans	775	733	1.055901
Asian-Americans	2112	2124	0.994163
Blacks in the 100 institutions	3845	3714	1.035227
Blacks/outside 100/SATs	7142	7378	0.967986
Blacks/outside 100/no SATs	867	968	0.895346
Whites/less than $10,000/SATs	9232	9193	1.004279
Whites/less than $10,000/no SATs	857	840	1.020809
Whites/more than $10,000/SATs	9537	9661	0.987187
Whites/more than $10,000/no SATs	485	566	0.857178

[a] These ratios were calculated by dividing the actual N by the sum of the reciprocals of the regression composites.

TABLE 6

FINAL WEIGHTED POPULATION

Subpopulation	Sample N[a]	Final Weighted Population
Chicanos	1800	21,759
Indians	1021	10,185
Puerto Ricans	775	15,520
Asian-Americans	2112	18,240
Blacks in the 100 institutions	3845	101,744
Blacks/outside 100/SATs	7142	25,930
Blacks/outside 100/no SATs	867	18,381
Whites/less than $10,000/SATs	9232	233,182
Whites/less than $10,000/no SATs	857	163,693
Whites/more than $10,000/SATs	9537	699,808
Whites/more than $10,000/no SATs	485	370,612
Total	37,673	1,679,054

[a] Proprietary students not included in weighting procedures.

CHAPTER 3

A PROFILE OF COLLEGE STUDENTS
TWO YEARS AFTER MATRICULATION

This chapter provides a descriptive profile of the students in the study sample at the time of college entry and two years after matriculation. The analyses and tables in this section are based on the weighted Ns of students in the study.

Demographic Characteristics

Table 7 shows the demographic characteristics of the weighted students in the study sample. Men outnumbered women. The distribution of students by race/ethnicity paralleled the national distribution of racial and ethnic minorities among entering college freshmen. Of the 12 percent who were minority-group members, two-thirds were black. The age distribution again paralleled that of all students who begin college primarily on a first-time full-time basis. Over nine in ten are 18 and 19 years of age.

The religious background of the students reflects differences observed among minorities in general: Seven in ten Chicanos and over six in ten Puerto Ricans were of Roman Catholic background, compared with one-third of the whites. Well over half of all the students said they were middle-of-the-road in political ideology. Minority students, with the exception of Asian-Americans, were more likely than whites to say that they are liberal politically (Table 8).

Table 9 shows parental income and education. As expected, there were differences among the minority subgroups on these characteristics: Puerto Ricans, followed by blacks, came from the poorest homes. Surprisingly, American Indian students were similar to white students with respect to parental income. The parents of Chicano and Puerto Rican students had less formal education than the parents of students from the other minority groups. American Indians and Asian-Americans were similar to whites with respect to parental education.

High school grades and Scholastic Aptitude Test (SAT) scores are reported in Table 10. Asian-Americans had the highest grades, with over one in four making at least A- grade averages. Blacks tended to have the lowest high school grades: only 6.2 percent achieved A- or better averages. Puerto Ricans and blacks were most likely to have made SAT scores of 800 or less and American Indians were the least likely.

Table 11 reports the proportions of students who indicated that their academic preparation in high school was very good. Students felt most adequately prepared in history and social sciences, followed by science. They reported generally poor preparation in foreign languages. They were also inclined to indicate that they had poor study habits and limited vocational skills. There were some variations between the sexes, with women indicating better preparation in reading and composition, musical and artistic skills, and study habits. Of the minority groups, Chicanos tended most to feel that they are not well prepared in mathematics, reading and composition, or science.

Table 12 shows the degree plans and intended majors of the sample when they entered college in 1975. A very high proportion of Chicano students, almost half, reported that they either planned to get the Associate of Arts degree or no degree at all. On the other hand, a greater proportion of American Indians than of the other minorities or whites planned on getting Ph.D.'s, law degrees, or M.D.'s. With respect to intended majors, black students opted for business, education, history, political science, and social sciences; American Indians seemed to have a preference for social sciences; Asian-Americans tended to choose the biological sciences, the health professions, and to some extent technical fields; half the Chicanos indicated plans to major in business or in some kind of technical field; and Puerto Ricans planned to major in "other" nontechnical fields and in business.

The freshman questionnaire asked respondents to indicate the importance they assigned to each of a list of life goals. Table 13 shows the proportions indicating that the various life goals were very important or essential to them. There are some interesting differences among the various minorities: Puerto Rican students focused primarily on becoming an authority in their field or making a theoretical contribution to science. Chicano students were more interested in having political or social influence, keeping up with political affairs, and participating in community action programs. American Indians tended to endorse life goals of an artistic nature, such as becoming accomplished in one of the performing arts, writing original works, or creating artistic products. Blacks were primarily concerned with obtaining recognition from colleagues for making a special contribution to their field.

Types of Institutions Attended

Men and women matriculated at similar types of institutions (Table 14). Women were slightly more likely to enroll in four-year colleges, and men in universities and in two-year institutions. Men were more likely to attend selective institutions. A somewhat higher proportion of men (6.2 percent) than women (4.6 percent) attended institutions where tuition and fees exceeded $3,000, but the great majority of students of both sexes entered institutions where tuition and fees were less than $1,000.

Examining the distribution of minority students in the different types of institutions (Table 15), we find some interesting variations: Almost a third of the black students entered predominantly black institutions. Three in four Chicanos enrolled in two-year institutions, a reflection of the unusually strong community college systems in the Southwest and California, where most Chicanos live. Asian-Americans tended to enroll in universities, though they were more likely than white students to attend two-year colleges, again, a reflection of the high proportions of Asian-Americans in California. Puerto Ricans were much more likely to enroll in four-year colleges than in other types of institutions; the proportion entering universities was especially low. The great majority of Puerto Ricans live in New York City, where the CUNY system includes a number of four-year colleges.

The distribution of minorities by selectivity of the institution is not surprising in view of the high proportion of blacks enrolling in predominantly black institutions (which tend to have low selectivity scores) and the high proportion of Asian-Americans in universities (which tend to be selective). The distribution of students by institutional costs reflects the types of institutions attended. For example, fewer than one in ten blacks, but over one-third of Asian-Americans, entered institutions with tuition and fees of over $2,000. Over seven in ten Chicanos entered institutions with tuition and fees of less than $250, a reflection of their heavy concentration in two-year colleges. Puerto Ricans were about equally divided between expensive institutions and relatively inexpensive ones. Puerto Rican and Chicano students were more likely to attend public institutions, whereas whites and blacks were more likely to enter private colleges. Asian-Americans were more likely than other groups to be in large institutions, a function of their tendency to attend universities.

Two Years After Matriculation

The follow-up questionnaire (Fall 1977) contained a number of questions on the student's behavior and plans during the fall of 1977, experiences while in college, and financial situation.

College Enrollment Plans and Behavior in 1977

A somewhat higher proportion of women than men had no plans to enroll in the fall of 1977, but most of these students indicated that they had plans to enroll at some later date (Table 16). Among minorities, close to half the Chicano students said they would not be enrolled either full- or part-time in 1977 (Table 17). All groups of current nonattenders--whites and nonwhites--indicated plans to enroll at some later date, with the majority planning to re-enroll within the next two years.

Interruptions and Transfers

About a third of the students indicated that they had interrupted their studies for a period of time during the two years since matriculation. Men were much more likely to have done so than women (38.6 percent and 24.7 percent respectively). A somewhat higher proportion of black students (36.4 percent) than of other minorities indicated that they had interrupted their studies during those two years.

As to the reasons for such interruptions, the most common was financial situation, followed by a desire to work (Table 18). Women and minorities were more likely to say that personal or family illness was a very important reason for their interruptions of college. In addition, academic reasons were often cited as very important.

About half the students--and seven in ten blacks--said that a desire to get the degree was their most important reason for returning to school. Men and blacks were more likely than the other groups to give as an important reason their family's insistence that they return to school.

Plans to Enroll in the Same School or to Transfer

Of the students who were enrolled in the fall of 1977, over one-third were attending different institutions than they had entered the fall of 1975 (Table 19). The proportion was about the same for men and women, but there were some differences among the minority subgroups. A higher proportion of Puerto Ricans, blacks, and American Indians than of whites and other minorities were enrolled in the same institutions.

Most of the students who had transferred did so in the fall of 1977, two years after matriculation (Table 20). Fewer than one in ten of the transfer students had changed colleges during the first year. Of those who had transferred, the majority had originally entered a two-year institution (Table 21). Women were as likely to transfer from a four-year institution as from a two-year institution. A much higher proportion of American Indians and Chicanos than of other minorities had transferred from two-year institutions, in the case of Chicanos, a reflection of their strong tendency as freshmen to enroll in two-year institutions.

Reasons for Transferring

Students gave a variety of reasons for transferring to a different school (see Table 22). Over one-third of the men and one-fifth of the women said that they had completed their program at the original institution, most probably students who had entered two-year institutions and who were transferring for their junior year to a four-year institution. Changes in career plans or in goals were reasons cited by more than one-fifth of the transfer students. Women were more likely than were men to transfer in order to be closer to home or to attend a different-sized school. About one in eight students transferred to attend a less expensive school.

The various minority subgroups differed somewhat in their reasons for transferring (Table 19). About three in ten Asian-Americans and American

Indians said they wanted to go to a school with a better rating, but only half as many Chicanos cited this reason. American Indians and Chicanos were most likely to say they had completed their training at the original school. Chicanos and blacks were most likely of all groups to say they transferred because of the better social life at the second school. Puerto Ricans more often than others cited financial constraints: inability to get the aid they needed and the desire to attend a less expensive school.

Discontinuation of Study

Over half the students who discontinued their studies did so during the second year (1976-77) (Table 23). This group also gave a variety of reasons for leaving college (Table 22). Over one in four had simply completed their program of study. The three most common reasons, each cited by about one in three of this group, were reconsideration of goals, desire for practical experience, and boredom with being a student. Family responsibilities, inability to get aid, and desire to be further away from home were cited as reasons more often by men than women.

The racial/ethnic groups differed somewhat in their reasons for discontinuing their education. The most common reasons for whites were reconsideration of goals, boredom with being a student, and desire for practical experience. Blacks gave as reasons reconsideration of goals, poor academic performance, family responsibilities, and inability to get aid. American Indians, besides reconsideration of goals and changes in career plans, indicated that family responsibilities were an important reason for their leaving school. Asian-Americans cited dissatisfaction with the first school, boredom with being a student, and a good job offer. Family responsibilities, a good job offer, changes in career plans, lack of financial aid, and desire to be closer to home were most often listed by Chicanos. Puerto Ricans reported reconsideration of goals, poor academic records, dissatisfaction with the first school, and desire to be closer to home as important reasons. They were also most apt of any group to feel that they did not fit in at the first school.

Residence

Where students live during their college careers has financial implications for the institution and for the student. Past research has indicated that a student's residence while attending college is an important factor in his/her persistence (Astin, 1975). As Tables 24 and 25 show, the student's residence varies depending on the type of institution attended. Whereas three-fourths of students in universities live in college dormitories during the first year, only one-fourth of the two-year college students do so. Some shifts take place in the second year, with only half of the university students living in dormitories; the proportion living in fraternities and sororities more than doubles, and many more into private apartments during their second year. The proportion of university students living with parents and relatives rises slightly. These same patterns of residential change held true for four-year and two-year college students as well, except that the latter did not move into fraternities and sororities since two-year colleges do not have Greek societies.

For both academic years, a higher proportion of women than men lived in college dormitories (Table 26). Men were more likely to live in private homes, apartments, or rooms. Nonblack minority students, especially Puerto Ricans, were much more likely than whites or blacks to live at home, a function of the type of institution attended by some of these students. Whereas white students shifted to fraternity or sorority houses during their second year, this was not the case with minority students; those who shifted out of college dormitories tended to move to private housing.

College Experiences

The follow-up survey queried students about their experiences while in college (see Tables 27 and 28). During the first two years of college, close to three in ten said they had changed their major, with women being slightly more likely to do so than men, and Asian-Americans more likely than the other minorities. In addition, about one in four students had changed career choice; again, this tendency was most marked for women and for Asian-Americans, along with American Indians.

Almost half the students said that the family had given them a lot of encouragement to stay in school. Close to one in five had considered dropping out. More than half the men and three in ten women had participated in sports; sports participation was much more common among whites than among minorities. About one-fourth of the students indicated that they had joined some kind of a social fraternity, sorority, or club. About one in five had failed one or more courses, with black students more likely to have done so than others and Chicanos less likely. One in ten black students had some experience with the TRIO program (Upward Bound, Educational Opportunity Program, or Talent Search), a larger proportion than in any other group.

Work Experiences

Tables 29-34 give information on the work experiences of the students: the proportion who worked, their hours, their earnings, location of work (whether on- or off-campus), the extent to which the work was related to their field of study, and their job satisfaction.

Over half the students had worked while in college, with women being slightly more likely to do so than men and American Indians and Asian-Americans more likely than other racial/ethnic groups (Table 29). Of the students who worked, fewer blacks than other minority-group students worked 21 hours or more. About one-third of the men, but only one-fourth of the women, worked 21 or more hours per week.

Over half the employed students reported that their typical weekly pay was less than $50, though 7 percent said they earned $100 or more (Table 30). A high of 22 percent of the Puerto Ricans--but only 12 percent of the Chicanos, 11 percent of the American Indians, 10 percent of the blacks, 10 percent of the Asian-Americans, and a mere 6 percent of the whites--earned $100 or more per week. A possible explanation here is that jobs may be more available in New York City, where the great majority of Puerto Rican students live.

Two-thirds of the employed students worked off campus (Tables 31 and 32). Women were more likely than men to have on-campus jobs. Of the racial/ethnic subgroups, only black students were more likely than not to work on campus.

The majority of employed students indicated that their work was not related to their field of study (Table 33). However, about one in four

Chicano students said that their work was closely related to their major.

Seven in ten working students said that they were somewhat or very satisfied with their jobs, but 17 percent said they were somewhat or very dissatisfied (Table 34). Chicanos were the most satisfied, perhaps because their work tended to be related to their area of study. Job dissatisfaction ran higher among men than among women and among minority students than among whites, except for Chicanos and for Asian-Americans, the latter tending to express "no opinion."

Financial Aid

In examining financial aid, we looked first at students' overall financial situation, including their perceptions about their ability to finance their education, then at their sources of information about financial aid. Finally, the types and amounts of aid that students actually received were considered.

Financial Situation. Close to two in three students had at least some concern about financing their education (Table 35). Women were somewhat more concerned than men. Similarly, blacks and Puerto Ricans expressed more concern than the other minorities or whites. In part these concerns stem from students' perceptions of their financial situation.

About two in five students said that they have major expenses or debts, such as educational and medical expenses (Tables 36 and 37). Of greater interest is the finding that one in ten students contributed financially to their parents and that one in twenty was a head of household or a single parent. Chicanos and Puerto Ricans--and, to a lesser extent, blacks--were more likely than others to contribute to their parental families, and blacks and Chicanos more likely to be heads of households or single parents.

About one-fourth of the sample said that their parents had a low income and thus could not help them with college expenses; this situation was much more common among minority students--especially Puerto Ricans and blacks--than among whites. One in ten students said that their parents were not willing to help them with college expenses.

Sources of Information. As students prepare to enter college, information about college costs and methods for financing their education becomes very important. One of the items in the survey questionnaire asked respondents to indicate their sources of information about ways to finance their college education. Most of the students utilized three main types of sources: high school counselors, college financial aid and admissions offices and literature, and family and peers (Tables 38 and 39). Minorities tended to depend much more on teachers and counselors than did whites, and white students depended more on their families as a source of information about college costs and financing.

The Application Process. Because it has often been charged that the financial aid application form is so complicated that it becomes a barrier for many students who may need financial aid, any information on this point could have important policy implications. Close to three in five students had applied for aid. Of these, slightly fewer than half indicated that they found the forms somewhat or very difficult (Table 40). The extent to which this difficulty discourages some students from applying should be investigated further so that the forms can be redesigned if there is a need to do so.

The time that students receive information about the outcome of their financial aid application is critical to their decision of whether to enter college or not. Thus, it is important to know whether students are notified well in advance of the academic year. Students were asked to indicate at what time they had received this information; nine in ten were notified at least a month before the start of the academic year.

Actual Receipt of Financial Aid. About three in five students indicated that they had applied for financial aid, and about the same proportion said that they had received some kind of aid. Of the aided students, in 1975-76, about half had only a grant, 8 percent had only a loan, and about 3 percent had work-study only (Tables 41 and 42). The remainder had some kind of aid "package." One in seven, the largest share, said that their package was composed of a small grant and a loan. Some 8.5 percent had packages that included grants, loans, and work-study. In the first year, about equal proportions of men and women had grants only; by the second year (1976-77), a somewhat higher proportion of men had a grant only and the proportions of women with a loan only increased. Among minority students, American Indians were less likely to receive financial aid than others. About nine in ten black students, more than eight in ten Chicanos and Puerto Ricans, and over three in five Asian-Americans said that they had some form of aid. Of aided black students, fewer than half had grants only, and the remainder had some sort of package. A minute proportion of black students were on work-study only; similarly, fewer than 3 percent indicated that they had a loan only.

In the second year, the numbers of minority students on grants only increased slightly. The greatest change occurred for Puerto Rican students; 58 percent of aided Puerto Rican students had grants only the first year, but 72 percent had grants only the second year. Of the minorities, American Indians were most likely to have only a loan.

Tables 43-46 list the proportions of students with different types of aid. In both years, a somewhat higher proportion of women than men had each type of aid except for GI benefits and FISL or GSLP loans. Slightly more than three in five students indicate that they received some support from their parents, and 13 percent had tuition waivers. The remaining categories of aid with high proportions of students are: BEOG, state scholarship or grant, local or private scholarship, NDSL, and college work-study. There were some shifts between first and second academic year. The proportions with local or private scholarships, vocational grants, and "other" grants dropped, and the proportions participating in CWS increased. Of minority students, Asian-Americans were most similar to white students in terms of parental support. Fewer than half the blacks and Chicanos and fewer than one-third of the Puerto Ricans said that they got parental support. Blacks and Puerto Ricans were much more likely than others to have BEOGs, whereas Asian-Americans and American Indians were much more likely to have state, local, or private scholarships and grants. In addition, a much higher proportion of blacks received some funding from CWS and NDSL, though these forms of aid were often packaged in various ways (see Tables 41 and 42).

Tables 47 and 48 show the average amounts of financial aid received by type of institution attended. The average amount varies, with those attending the more high-cost institutions (private four-year colleges and private universities) receiving larger amounts. Puerto Ricans and Chicanos had somewhat larger amounts of aid than the other minorities.

Tables 49 and 50 report the proportions of students indicating various experiences with financial aid. Close to half of all students said that financial aid had made it possible for them to attend school. The proportion of minority students (except Asian-Americans) agreeing with this statement was even higher. Another item of interest is the proportion of students claiming themselves financially independent of their parents: about one in eight of the total group, from a high of one-fifth of the American Indians to a low of one-tenth of the Chicanos and whites. About two in five students said their experiences with financial aid had been generally favorable, though the proportions were higher among Puerto Ricans and blacks and lower among Chicanos and Asian-Americans. Close to one-fifth of the students said that they had had unfavorable experiences with financial aid: Men were more likely to endorse this statement than women. Among minorities, over one in five American Indians but only 9 percent of the Chicanos said that they had had unfavorable experiences with financial aid. The final item to be noted is that rather large proportions of Chicanos reported not knowing about financial aid options and believing that they were not eligible for financial aid. The policy implication here is that Chicano students may need more guidance and better information about financial aid than they have been getting.

Satisfaction with College

The survey questionnaire asked students to indicate whether they were satisfied or dissatisfied with various aspects of college life; Tables 51 and 52 show the proportions saying they were satisfied. Overall, students seemed most satisfied with various academic activities and least satisfied with advising, job placement, and assistance in finding part-time work. In addition, large proportions expressed satisfaction with orientation for new students, health services, child care facilities, extracurricular activities, and social life. Among minority students, there were some variations. Black students tended not to be satisfied with registration procedures, distribution of transcripts, on-campus housing, and help in finding part-time work; Asian-Americans were least satisfied with advising and counseling; Puerto Ricans with job placement, financial aid advice, on-campus housing, and help in finding part-time work; American Indians with such academic features as tutoring and remedial programs, independent study, honors programs, ethnic studies, and women's studies; and Chicanos with tutoring and remedial programs, on-campus housing, and honors programs, and ethnic and women's studies. It is interesting that Chicanos were most likely to indicate satisfaction with child care facilities perhaps because they tended to enroll in two-year colleges, where efforts are usually made to provide such services.

Summary

Demographic Characteristics

- About 95 percent of the students were 19 years old or younger.
- About one in eight were nonwhites.
- Puerto Ricans came from the most financially deprived homes.
- Over one-third of American Indians reported parental incomes in excess of $20,000.
- Almost one-third of American Indian and Asian-American students reported that their fathers were college graduates.
- Asian-Americans had the highest grade-point averages in high school.
- American Indians had the highest degree aspirations; over three in ten planned to get a Ph.D. or professional degree.
- Chicanos were most likely to express social and political concerns as life goals, whereas American Indians aimed for artistic achievement.

Types of Institutions

- Women were more likely to enroll in four-year colleges, and men in universities and two-year institutions.
- Men tended to enroll in more selective and more expensive institutions.
- Almost one-third of the blacks entered black institutions; three in four Chicanos entered two-year colleges.
- More whites and blacks than others enrolled in private schools.

Enrollment Behavior and Plans

- About one in five students who started college in 1975 were not enrolled in college in the fall of 1977, the time of the survey follow-up.
- Close to two in five men and one in four women had interrupted their studies, usually for financial reasons, though women and minorities also cited family reasons.
- Slightly more than one-third of the students had transferred. Of these transfers, 57 percent came from two-year and 43 percent from four-year colleges. The most common reasons for transferring were having completed their program at the original school, being dissatisfied with the original school, reconsidering goals, changing career plans, and wanting to attend a different-sized school or one with a better rating.
- Half of those who discontinued their studies did so during or after the second year. The most common reasons were: completion of program (27 percent); reconsideration of goals (34 percent); desire for practical experience (33 percent); and boredom with being a student (33 percent).

Residence

- During the second year of college, students tended to move from college dorms to fraternities or sororities and to private housing; Puerto Ricans were most likely to live at home with their parents.

Experiences in College

- One-fourth changed their major and career plans.
- Half the men participated in sports, though minority students were much less likely than whites to do so.
- One-fourth men and women joined fraternities, sororities, or other social clubs.

Work

- Over half of the students worked while in college. More women than men worked, but men were more likely to work 21 hours or more a week.
- Over half of the working students earned less than $50 per week.
- The majority of employed students worked off campus; their work was usually unrelated to their field of study.
- Fewer blacks worked, and those who worked were more likely to have jobs on campus.

Financial Situation and Aid

- Over two-thirds expressed at least some concern about their ability to pay for college. Women were more likely to be concerned than men, and blacks and Puerto Ricans were the most concerned of the racial/ethnic groups.
- Fifteen percent of the students had financial responsibilities for their own families and for their parents.
- One-fourth said that their parents could not give them any financial help.

- High school counselors, the college financial aid office and admissions, and family were the most important sources of information on college costs and financial aid.
- Three in five of the students applied for financial aid, and about all who applied got some form of aid.
- Of aided students, about one-half had grants only, and about two in five had a package of some kind.
- By the second year the proportion of men with grants and of women with loans rose.
- Over nine in ten blacks, four in five Chicanos and Puerto Ricans, and three in five Asian-Americans and American Indians received financial aid.
- Black students were least likely of all groups to be on College Work-Study only (fewer than 1 percent).
- More minority students had grants only during the second year.
- Over three in five students got some financial support from their parents, and about 13 percent reported having a tuition waiver.
- Blacks were most likely of any group to have BEOG, whereas Asian-Americans and American Indians tended to have state and local scholarships.
- The typical amount of financial aid was a little over $1,500. The average amount varied according to type of school attended.
- About half of all students said that financial aid made it possible for them to go to college.
- Chicanos said that they lacked information about financial aid.

TABLE 7

DEMOGRAPHIC CHARACTERISTICS
(In Percentages[a])

Sex	
Men	53.4
Women	46.6
Race/Ethnicity	
White	87.4
Black	8.5
American Indian	0.7
Asian-American	1.1
Chicano	1.3
Puerto Rican	1.0
Age	
16 or younger	0.2
17	3.3
18	75.4
19	15.7
20	2.7
21 or older	2.7

[a] All numbers in the remaining tables in this chapter are in percentages, unless indicated otherwise.

TABLE 8

RELIGION AND POLITICAL IDEOLOGY

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Religion									
Protestant	42.0	39.8	44.5	39.2	77.5	50.6	42.9	10.1	16.6
Roman Catholic	31.5	33.2	29.6	33.2	7.5	18.8	14.9	72.3	62.5
Jewish	3.9	3.3	4.6	4.4	0	0	0.2	0.8	1.8
Other	22.6	23.7	21.3	23.1	15.0	30.5	42.0	16.7	19.1
Political Ideology									
Far left	1.4	1.5	1.3	1.1	3.3	3.4	0.7	5.7	2.6
Liberal	26.3	27.3	25.1	25.7	30.0	40.9	27.2	34.9	24.9
Middle-of-the-road	58.4	55.5	61.7	59.5	50.7	40.4	60.2	43.1	62.8
Conservative	13.4	15.0	11.5	13.4	13.5	11.8	10.8	16.4	9.7
Far right	0.5	0.7	0.4	0.3	2.4	3.5	1.1	0	0

TABLE 9

PARENTAL INCOME AND EDUCATION

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Income									
Less than $6,000	11.0	9.9	12.3	6.9	46.5	10.9	16.6	32.0	36.8
$6,000-10,000	11.6	10.6	12.8	10.2	21.8	18.1	19.8	17.7	28.7
$10,000-15,000	27.2	27.3	27.2	28.6	15.2	18.9	22.9	25.7	20.3
$15,000-20,000	16.0	17.0	14.8	17.0	7.1	15.7	10.7	13.7	10.0
$20,000-30,000	20.3	21.2	19.3	22.0	7.0	24.2	16.8	7.5	1.6
$30,000 or more	13.8	14.0	13.6	15.2	2.4	12.1	13.1	3.3	2.6
Father's Education									
Grammar school or less	6.0	6.1	6.0	4.1	16.2	4.4	10.0	46.8	28.2
Some high school	13.2	14.4	11.9	11.6	26.9	19.7	10.9	19.3	34.7
High school graduate	30.6	32.2	28.8	30.5	35.0	25.6	30.9	19.6	24.2
Postsecondary school other than college	3.4	2.9	3.9	3.5	2.7	4.6	3.4	1.6	1.4
Some college	12.7	13.1	12.4	13.4	8.5	14.3	13.1	4.2	5.0
College degree	18.3	16.5	20.3	20.0	5.8	17.9	12.6	4.1	1.9
Some graduate school	2.6	2.8	2.3	2.8	1.3	3.7	3.6	0	0.3
Graduate degree	13.1	12.0	14.3	14.2	3.6	9.8	15.6	4.4	4.4
Mother's Education									
Grammar school or less	4.3	4.6	4.0	2.6	10.5	3.8	13.1	47.1	36.2
Some high school	10.8	9.9	11.9	8.7	29.0	13.9	9.6	20.6	27.8
High school graduate	42.1	44.9	38.9	43.3	36.0	46.6	37.3	23.0	22.7
Postsecondary school other than college	6.5	5.4	7.8	7.0	3.3	5.9	3.9	1.2	2.4
Some college	14.5	14.6	14.3	15.4	9.0	11.9	10.0	4.2	2.3
College degree	14.4	13.5	15.4	15.4	7.7	10.9	16.2	2.4	1.3
Some graduate school	2.2	2.1	2.4	2.3	1.2	2.7	3.2	0	4.1
Graduate degree	5.1	4.9	5.3	5.4	3.3	4.4	6.6	1.5	3.3

TABLE 10

HIGH SCHOOL GRADES AND SCHOLASTIC APTITUDE TEST SCORES

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
High School Grades									
A	8.4	6.9	10.0	9.0	2.4	5.0	11.8	3.7	6.1
A-	12.7	10.5	15.2	13.8	3.8	11.4	14.5	6.4	2.7
B+	19.1	16.7	21.9	19.7	14.3	15.9	18.8	11.1	22.4
B	27.3	25.6	29.3	27.6	25.4	30.1	24.4	18.1	33.2
B-	15.6	18.2	12.6	15.9	14.9	15.8	7.9	12.7	8.9
C+	9.9	13.4	5.9	8.8	21.1	12.4	9.3	10.3	11.0
C	6.9	8.5	5.0	5.3	16.8	9.4	12.7	37.4	14.5
D	0.1	0.2	0.1	0	1.3	0	0.5	0.3	1.3
SAT Scores									
400-500	1.1	1.0	1.2	0.3	9.2	0	1.1	4.8	7.0
501-600	4.6	4.0	5.3	2.5	26.5	2.3	5.1	12.4	21.6
601-700	10.4	8.8	12.1	8.2	30.6	6.2	10.5	34.9	34.8
701-800	13.5	11.7	15.5	13.4	13.9	11.0	13.5	17.1	18.7
801-900	18.8	16.4	21.4	19.5	10.6	34.6	22.5	15.1	6.0
901-1000	18.2	18.4	17.9	19.7	5.0	14.4	11.9	4.1	6.3
1001-1100	15.4	17.0	13.7	16.8	2.3	13.6	16.2	6.3	1.5
1101-1200	9.2	11.1	7.2	10.0	1.4	9.6	8.0	3.7	2.1
1201-1300	5.6	7.0	4.0	6.1	0.3	5.7	6.7	1.6	1.7
1301-1400	2.4	3.3	1.5	2.7	0.1	2.7	3.0	0.1	0.1
1401-1500	0.8	1.2	0.4	0.9	0	0	1.5	0	0.2
1501-1600	0.1	0.1	0	0.1	0	0	0.5	0	0

TABLE 11

ACADEMIC PREPARATION IN HIGH SCHOOL

(Percentage responding "very good")

High School Preparation in:	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Mathematical skills	31.4	33.1	29.4	32.9	20.6	22.1	30.2	18.0	22.0
Reading and composition	30.5	25.7	36.0	30.5	32.8	33.7	24.8	17.2	27.5
Foreign languages	14.8	11.4	18.8	14.8	12.7	15.6	15.2	17.9	31.4
Science	34.1	37.1	30.7	35.3	26.6	37.4	29.6	17.8	19.6
History, social sciences	39.2	39.4	39.0	39.1	41.5	37.1	34.5	34.5	43.2
Vocational skills	17.6	16.5	18.9	16.9	22.9	12.5	13.8	20.3	40.6
Musical and artistic skills	23.3	18.8	28.5	23.1	26.5	32.5	18.5	17.4	16.0
Study habits	18.6	15.6	22.1	18.1	24.5	14.7	17.5	14.7	22.9

TABLE 12

DEGREE PLANS AND INTENDED MAJORS OF 1975 ENTERING FRESHMEN

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Degree Plans									
None	2.6	2.6	2.5	2.3	4.0	3.1	7.0	4.9	4.5
Associate (A.A. or equivalent)	12.9	13.6	12.1	12.7	11.1	7.8	9.1	40.4	13.4
Bachelor's degree (B.A., B.S., etc.)	37.1	34.3	40.4	38.6	26.9	20.7	27.1	21.2	41.4
Master's degree (M.A., M.S., etc.)	25.3	24.1	26.7	25.0	30.7	35.0	26.1	14.5	16.8
Ph.D. or Ed.D.	7.6	8.8	6.3	7.3	10.1	14.5	15.9	6.5	2.7
M.D., D.O., D.D.S., or D.V.M.	5.7	6.9	4.3	5.8	4.4	9.4	8.9	5.3	2.8
LL.B. or J.D. (Law)	4.4	5.7	2.9	4.3	4.5	6.5	1.2	4.7	14.1
B.D. or M.Div. (Divinity)	0.6	0.5	0.8	0.6	1.5	0	0.1	0.2	2.6
Other	3.8	3.6	4.1	3.5	7.0	2.9	4.6	2.4	2.2
Intended Major									
Agriculture	3.1	4.4	1.6	3.4	0.7	3.3	0.6	0	0
Biological science	7.0	8.0	5.9	7.3	3.0	8.2	13.9	4.9	1.8
Business	19.9	23.5	15.8	20.0	20.7	7.7	13.7	20.2	14.4
Education	9.2	3.1	16.1	9.2	12.3	7.1	3.7	6.9	2.2
Engineering	8.3	14.4	1.4	8.6	5.5	4.0	8.9	1.7	7.0
English	1.0	0.5	1.5	1.0	0.8	0.3	4.0	0	2.6
Health professions	5.7	5.1	6.3	5.6	6.1	8.5	10.8	2.5	4.4
History and political science	7.2	1.2	13.8	6.9	10.3	6.0	10.3	2.0	7.0
Humanities	3.3	3.9	2.6	3.2	4.2	9.6	2.2	2.1	6.2
Fine Arts	1.9	1.4	2.5	1.9	1.6	1.9	0.7	1.9	2.3
Mathematics and statistics	1.0	0.9	1.1	1.0	1.0	0	1.9	0.3	0.5
Physical sciences	2.3	3.3	1.3	2.5	1.2	4.0	2.5	0.3	0.5
Social sciences	6.8	4.4	9.5	6.5	10.6	14.0	6.2	8.0	8.4
Other fields (technical)	9.6	12.1	6.8	9.4	8.1	4.1	10.3	32.8	10.4
Other fields (nontechnical)	9.5	10.1	8.8	9.2	10.4	20.5	3.3	14.4	26.5
Undecided	4.1	3.4	5.0	4.2	3.5	0.7	7.1	2.1	5.9

TABLE 13

LIFE GOALS OF 1975 ENTERING FRESHMEN
(Percentage marking "very important" or "essential")

Life Goals	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	10.1	7.8	12.7	9.7	13.9	16.0	6.7	7.2	9.0
Becoming an authority in my field	72.4	74.8	69.7	71.5	79.4	76.0	74.8	78.1	81.9
Obtaining recognition from my colleagues for contributions to my special field	43.6	47.7	39.0	43.2	48.4	39.6	38.6	44.3	46.7
Influencing the political structure	12.4	15.3	9.0	11.2	18.7	23.1	12.5	35.5	20.3
Influencing social values	28.4	25.2	32.0	27.5	34.3	38.6	27.0	41.7	35.6
Raising a family	57.0	54.8	59.5	56.9	58.7	46.5	57.4	58.2	61.6
Having administrative responsibility for the work of others	29.3	32.9	25.2	27.9	40.4	33.8	27.1	46.5	30.7
Being very well-off financially	45.7	52.1	38.4	44.6	55.4	41.9	40.9	47.8	65.0
Helping others who are in difficulty	67.6	60.5	75.8	66.1	78.8	80.9	69.8	84.3	74.2
Making a theoretical contribution to science	13.0	16.1	9.5	12.5	14.5	12.6	20.9	22.0	25.3
Writing original works (poems, novels, short stories, etc.)	11.7	8.1	15.7	11.4	13.1	25.4	11.2	15.7	7.6
Creating artistic work (painting, sculpture, etc.)	12.8	7.1	19.3	12.7	12.9	20.5	12.0	16.3	10.5
Being successful in a business of my own	40.6	49.4	30.6	39.7	47.1	40.4	42.1	60.3	37.6
Becoming involved in programs to clean up the environment	25.6	28.4	22.5	24.9	29.0	39.1	23.6	40.2	35.0
Developing a meaningful philosophy of life	65.6	61.9	69.9	64.9	71.3	68.8	65.1	75.7	61.1
Participating in a community action program	28.3	25.7	31.2	27.2	37.9	28.6	21.4	39.2	35.0
Keeping up to date with political affairs	38.4	42.1	34.1	38.7	35.2	[illegible]	29.7	46.8	36.3

TABLE 14

INSTITUTIONAL CHARACTERISTICS BY SEX

	Total	Men	Women
Type of control			
Public	75.9	76.8	74.9
Private	24.1	23.2	25.1
Type			
University	18.9	19.1	18.6
Four-year college	38.3	36.3	40.7
Two-year college	40.2	42.2	37.9
Predominantly black	2.6	2.5	2.9
Selectivity[a]			
Less than 775	3.8	3.6	4.0
775-849	25.8	25.5	26.3
850-924	23.7	23.1	24.4
925-999	19.9	20.5	19.2
1000-1074	10.9	10.1	11.9
1075-1149	8.8	8.6	9.0
1150-1224	3.7	4.1	3.1
1225-1299	2.4	3.4	1.5
1300 or more	0.9	1.2	0.6
Size			
Less than 250	0.3	0.2	0.3
250-499	4.2	3.8	4.6
500-999	9.8	9.0	10.7
1000-1499	4.7	4.9	4.4
1500-1999	12.6	13.4	11.6
2000-4999	29.2	29.7	28.6
5000-9999	19.3	20.0	18.5
10000-19999	17.9	16.8	19.1
20000 or more	2.1	2.1	2.1
Tuition and fees (from HEGIS)			
Less than $250	8.7	9.3	8.0
$ 251-500	12.1	12.8	11.3
$ 501-750	38.1	37.2	39.2
$ 751-1000	13.9	13.7	14.1
$1001-1500	7.2	7.7	6.7
$1501-2000	3.2	2.5	3.9
$2001-3000	11.4	10.7	12.2
$3001 or more	5.4	6.2	4.6

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[a] Selectivity reflects the mean SAT scores of enrolled students.

TABLE 15

INSTITUTIONAL CHARACTERISTICS BY RACE

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Type of control							
Public	75.9	75.5	75.9	78.6	77.9	86.9	92.2
Private	24.1	24.5	24.1	21.4	22.1	13.1	7.8
Type							
University	18.9	19.8	10.6	13.9	26.1	7.0	6.7
Four-year college	38.3	40.1	23.0	39.7	26.7	16.2	63.2
Two-year college	40.2	40.0	35.5	44.5	47.2	76.0	29.9
Predominantly black	2.6	0	30.7	1.8	0.1	0.6	0.2
Selectivity							
Less than 775	3.8	1.6	27.1	1.4	0.9	0.2	8.6
775-849	25.8	23.0	39.0	32.1	44.1	73.2	72.2
850-924	23.7	25.4	12.5	25.2	11.9	11.8	0.9
925-999	19.9	21.3	11.9	18.2	6.8	3.6	7.3
1000-1074	10.9	11.9	3.5	8.4	6.0	4.3	4.4
1075-1149	8.8	9.4	2.6	7.9	19.1	3.6	3.5
1150-1224	3.7	3.9	1.7	2.4	3.9	0.7	0.6
1225-1299	2.4	2.5	1.0	2.0	3.7	2.1	1.6
1300 or more	0.9	0.9	0.6	2.5	3.6	0.5	0.7
Size							
Less than 250	0.3	0.2	1.1	0	0	0	0
250-499	4.2	4.6	1.3	3.1	0.4	1.3	0
500-999	9.8	10.1	10.9	6.5	4.2	0.8	0
1000-1499	4.7	4.4	8.9	2.2	1.8	0.4	1.1
1500-1999	12.6	11.5	15.3	30.4	10.6	68.4	4.8
2000-4999	29.2	29.3	30.8	31.7	12.0	5.7	59.7
5000-9999	19.3	20.1	14.2	8.6	18.3	3.4	27.5
10000-19999	17.9	17.9	16.4	15.2	36.9	17.1	6.6
20000 or more	2.1	2.0	1.1	2.3	15.7	2.9	0.5
Tuition and fees (from HEGIS)							
Less than $250	8.7	7.1	15.1	22.5	9.1	72.5	3.3
$ 251-500	12.1	12.3	11.8	11.7	3.7	0.6	17.4
$ 501-750	38.1	38.6	37.3	32.8	45.0	8.6	33.1
$ 751-1000	13.9	14.3	12.2	9.6	5.3	3.1	11.9
$1001-1500	7.2	7.3	8.3	4.6	1.7	0.7	0
$1501-2000	3.2	2.9	7.6	1.0	0	1.2	2.2
$2001-3000	11.4	11.9	5.1	11.7	20.0	11.1	19.4
$3001 or more	5.4	5.6	2.7	6.1	15.3	2.2	12.8

TABLE 16

ENROLLMENT PLANS FOR FALL 1977 BY SEX

	Total	Men	Women
No plans to enroll	11.8	10.1	13.1
Yes, full-time	73.8	75.4	72.1
Yes, part-time	4.9	4.1	5.9
No, but within two years	8.5	9.0	8.0
No, but sometime after two years	0.6	0.7	0.5
Never	0.3	0.1	0.5

TABLE 17

ENROLLMENT PLANS FOR FALL 1977 BY RACE

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
No plans to enroll	11.8	12.2	8.8	9.3	4.2	20.8	9.0
Yes, full-time	73.8	74.2	75.0	72.6	79.7	47.4	60.3
Yes, part-time	4.9	4.8	5.6	2.0	5.8	7.5	8.9
No, but within two years	8.5	8.2	8.7	11.7	8.8	23.5	15.8
No, but sometime after two years	0.6	0.4	1.8	4.4	1.5	0	6.1
Never	0.3	0.3	0	0	0	0.8	0

TABLE 18

REASONS[a] FOR INTERRUPTING EDUCATION AND RETURNING TO COLLEGE[b]

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Reasons for Interrupting									
Interrupted studies for financial reasons	38.5	40.0	36.0	35.2	54.9	47.9	37.9	57.3	50.4
Interrupted studies for illness (personal or family)	11.2	7.7	17.0	8.7	25.0	8.8	22.2	17.7	31.0
Interrupted studies for academic reasons	13.9	18.0	11.4	13.2	20.7	10.5	17.8	9.7	5.8
Interrupted studies because wanted to travel	4.9	4.3	6.1	5.6	1.3	1.5	0.7	4.3	0
Interrupted studies because wanted to work	31.2	29.7	33.4	30.2	39.0	19.3	14.9	43.9	27.3
Reasons for Returning									
Returned to school because important to get degree	49.5	46.0	55.2	45.9	70.6	46.1	56.3	65.3	56.2
Returned to school because family insisted	7.7	9.7	4.4	7.4	10.4	3.9	3.8	12.8	2.7
Returned to school because could not get work	6.5	6.8	5.9	5.9	11.0	0	6.5	2.9	0.5
Returned to school because did not like my job	5.8	5.5	6.2	4.8	11.5	0	4.0	18.4	9.6

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[a] Percentages represent those who indicated "very important" reason.

[b] Percentages based on those students who had left school some time between fall 1975 and spring 1977 and who indicated plans to re-enroll in fall 1977.

TABLE 19

COLLEGE PLANS FOR FALL 1977[a]

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Plan to attend same school	64.6	64.8	65.5	64.5	70.9	70.7	67.1	50.2	74.2
Plan to attend a different school	34.4	35.1	34.4	35.4	29.0	29.4	32.8	49.9	25.7

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[a] Percentages based on students enrolling in fall 1977.

TABLE 20

DATE OF TRANSFER TO ANOTHER INSTITUTION[a]

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
September 1975 to June 1976	7.7	7.3	7.9	7.5	7.4	2.5	2.3	11.1	12.8
Fall 1976	19.5	18.5	20.9	19.6	20.1	7.5	16.4	10.8	38.0
After fall 1976	9.9	6.9	12.9	9.0	16.2	18.1	21.9	6.5	15.2
Fall 1977	62.8	67.1	58.1	63.3	55.7	71.7	59.5	71.0	33.9

[a] Percentages based on students who indicated they had transferred from original institution.

TABLE 21

TYPE OF ORIGINAL INSTITUTION OF STUDENTS WHO TRANSFERRED

Type of Original Institution	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
					Subgroups				
Two-year college	57	62.2	50.8	56.3	61.9	71.7	49.5	77.1	44.0
Four-year college or university	43	37.8	49.2	43.7	38.1	28.3	50.5	22.9	56.0

TABLE 22

REASONS[a] FOR TRANSFERRING AND LEAVING COLLEGE

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Reasons for Transferring[b]									
Completed program	28.9	35.8	20.8	29.0	26.5	55.4	16.6	45.0	15.6
Family responsibilities	4.4	4.4	4.5	3.4	15.6	10.2	7.4	6.9	0
Good job offer	4.2	4.9	3.3	3.5	10.4	6.6	3.3	12.1	4.8
Better social life	16.8	15.6	18.2	16.3	22.4	12.2	11.9	25.2	13.4
Go to different-sized school	22.6	19.0	26.9	22.3	25.8	29.0	25.6	25.0	18.9
Be farther from home	14.1	13.7	14.5	13.4	20.6	37.7	3.4	24.1	7.6
Be closer to home	13.2	8.6	18.8	12.3	22.2	13.9	19.7	13.6	29.2
Move to different location	11.6	12.1	11.0	11.1	16.6	21.2	9.1	16.6	11.8
Go to school with better rating	20.8	22.7	18.7	20.8	20.2	29.4	30.4	15.1	21.5
Didn't do so well academically	14.8	11.2	19.0	13.9	23.3	12.8	17.3	17.0	20.6
Reconsidered goals	23.0	20.9	25.5	23.2	20.2	12.9	30.7	11.7	46.0
Changed career plans	21.3	15.2	28.6	21.4	19.0	25.2	26.9	16.4	32.0
Dissatisfied with first school	25.0	22.8	27.6	24.7	26.9	38.7	21.5	21.9	39.5
Wanted less expensive school	13.1	10.0	16.8	12.6	16.4	15.3	16.1	16.1	22.7
Unable to get aid I needed	6.4	6.6	6.2	5.1	18.9	13.7	4.6	9.6	30.5
Didn't fit in at this school	13.5	13.3	13.8	13.2	16.7	17.8	19.2	8.4	11.9
Reasons for Leaving College[c]									
Completed program	27.4	28.5	26.2	27.7	16.1	16.9	43.5	46.7	11.5
Family responsibilities	13.1	18.3	7.6	11.9	18.7	26.0	20.9	35.0	16.7
Good job offer	21.1	20.0	22.2	21.0	15.9	12.6	25.2	31.5	30.6
Better social life	14.5	20.5	8.2	14.6	10.4	5.6	20.5	15.4	23.3
Go to different-sized school	5.3	5.0	5.6	4.4	8.0	17.4	23.7	16.5	17.5
Be farther from home	9.7	11.1	8.2	9.4	8.3	22.5	8.1	9.5	27.7
Be closer to home	8.0	6.3	9.8	6.7	16.1	1.6	18.0	25.1	32.1
Move to different location	11.6	9.1	14.3	11.4	8.7	22.3	16.0	13.6	25.4
Didn't do so well academically	21.3	21.7	20.9	21.1	21.6	26.6	22.0	13.6	49.3

(continued on next page)

TABLE 22

REASONS[a] FOR TRANSFERRING AND LEAVING COLLEGE

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Reasons for Leaving College (continued)									
Did not need further degree	16.7	19.9	13.2	17.1	11.8	4.6	6.7	15.9	17.5
Reconsidered goals	34.4	31.5	37.5	35.3	23.2	49.3	17.1	16.4	56.3
Changed career plans	21.2	23.1	19.2	21.2	15.7	26.6	15.7	26.8	37.1
Tired of being student	31.9	34.9	28.8	33.6	16.8	21.2	30.3	11.4	28.5
Dissatisfied with first school	19.2	21.1	17.3	19.8	13.5	13.0	30.4	5.7	33.3
Unable to get aid I needed	16.8	22.9	10.3	16.4	18.7	13.6	12.2	26.0	20.9
Wanted practical experience	33.0	42.7	22.7	35.0	12.5	17.1	23.4	19.8	22.7
More education did not improve job prospects	12.3	13.1	11.5	12.2	17.5	13.4	5.4	4.3	16.8
Didn't fit in at this school	8.5	10.3	6.5	7.7	15.8	10.1	19.3	4.5	33.7

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[a] Percentages represent those who indicated "very important" reason.

[b] Percentages based on students who indicated that they had transferred from their original institution.

[c] Percentages based on students who indicated they were not attending school in fall 1977.

TABLE 23

DATE OF DISCONTINUING SCHOOL[a]

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
September 1975 to June 1976	28.2	36.7	18.6	28.9	17.7	41.9	9.4	10.8	26.1
Fall 1976	21.1	19.7	22.8	19.4	31.4	17.4	40.3	31.4	35.1
After fall 1976	51.2	43.5	58.4	50.9	50.8	41.2	50.4	57.6	38.7

[a] Percentages based on students who indicated that they had discontinued school.

TABLE 24

STUDENT RESIDENCE, BY INSTITUTIONAL TYPE
1975-1976

Residence	Total	University	Four-year College	Two-year College
Parents	37.4	17.8	31.7	53.3
Spouse	0.8	0.3	0.4	1.5
Private apartment	9.1	3.5	4.4	16.8
Dormitory	49.3	75.8	60.0	24.8
Fraternity or sorority	0.6	1.3	0.9	0.0
Other campus	2.0	1.0	2.3	2.2
Other	0.7	0.2	0.3	1.4

TABLE 25

STUDENT RESIDENCE, BY INSTITUTIONAL TYPE
1976-1977

Residence	Total	University	Four-year College	Two-year College
Parents	38.3	21.2	33.2	52.4
Spouse	2.8	1.4	1.8	4.5
Private apartment	17.1	16.2	14.6	20.1
Dormitory	34.9	51.5	43.3	17.5
Fraternity or sorority	2.2	5.8	2.5	0.0
Other campus	3.4	3.1	3.3	3.7
Other	1.4	0.8	1.3	1.8

TABLE 26

RESIDENCE DURING COLLEGE

Residence	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
1975-1976									
With parents or relatives (not including spouse)	37.4	38.7	36.0	36.3	39.1	45.4	50.5	59.5	72.2
With spouse	0.8	0.6	1.0	0.5	2.3	4.1	1.3	7.5	2.6
Private home, apartment, or room	9.1	10.6	7.4	9.0	9.6	9.8	12.4	9.9	8.5
College dormitory	49.3	45.7	53.3	50.7	45.6	40.2	35.0	20.1	13.5
Fraternity or sorority house	0.6	1.0	0.3	0.7	0.2	0.3	0.1	0.2	0.5
Other campus student housing	2.0	2.3	1.7	2.1	1.3	0	0.6	2.4	0.4
Other	0.7	1.1	0.3	0.6	1.9	0.1	0.1	0.3	2.2
1976-1977									
With parents or relatives (not including spouse)	38.3	40.2	36.2	37.3	40.5	43.9	53.0	56.3	63.9
With spouse	2.8	2.0	3.7	2.6	3.5	4.8	1.5	11.1	5.8
Private home, apartment, or room	17.1	18.4	15.6	17.4	14.3	14.6	18.2	14.9	13.7
College dormitory	34.9	30.4	39.9	35.4	37.7	32.7	24.4	13.0	9.5
Fraternity or sorority house	2.2	3.4	0.7	2.4	0.1	2.6	0.4	0.2	0.6
Other campus student housing	3.4	3.8	3.0	3.6	2.2	1.4	1.9	3.7	1.4
Other	1.4	1.9	0.9	1.4	1.7	0	0.6	0.9	5.0

TABLE 27

COLLEGE EXPERIENCES SINCE FALL 1975 BY SEX

	Total	Men	Women
Changed major field	27.3	24.3	30.8
Received a lot of encouragement from my family to stay in school	45.9	44.5	47.5
Changed career choice	23.5	19.2	28.4
Failed one or more courses	20.2	21.7	18.4
Considered dropping out but didn't	18.7	18.4	19.1
Participated in a play or entered an art competition	7.5	7.3	7.8
Participated in intercollegiate or intramural sports	41.5	52.2	29.2
Joined a social fraternity, sorority, or club	24.3	24.2	24.3
It is very important to me to complete my original degree plans	52.2	51.9	52.5
I was in Upward Bound, Educational Opportunity Program, or Talent Search	2.5	3.0	2.0

TABLE 28

COLLEGE EXPERIENCES SINCE FALL 1975 BY RACE

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Changed major field	27.3	27.8	22.9	25.6	29.7	21.6	25.7
Received a lot of encouragement from my family to stay in school	45.9	45.9	48.3	37.6	35.8	48.5	37.3
Changed career choice	23.5	24.0	18.3	29.0	30.7	16.2	20.0
Failed one or more courses	20.0	18.5	35.9	28.7	21.1	16.7	26.3
Considered dropping out but didn't	18.7	18.0	24.9	21.7	24.6	18.9	18.1
Participated in a play or entered an art competition	7.5	7.4	7.8	19.1	7.5	6.4	3.5
Participated in intercollegiate or intramural sports	41.5	43.7	28.0	29.6	25.2	19.4	14.5
Joined a social fraternity, sorority, or club	24.3	24.3	25.0	25.1	18.0	23.3	23.5
It is very important to me to complete my original degree plans	52.2	51.4	58.1	50.5	51.6	62.5	55.4
I was in Upward Bound, Educational Opportunity Program, or Talent Search	2.5	1.6	10.3	5.5	3.1	5.9	6.6

TABLE 29

HOURS EMPLOYED WHILE IN SCHOOL

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Employed	54.3	53.1	55.7	54.0	54.3	62.7	62.5	58.1	54.2
1-5 hours[a]	9.9	8.9	11.0	9.6	13.1	4.7	5.3	11.4	9.9
6-10 hours	19.9	17.9	22.1	19.7	22.8	14.4	16.4	29.0	13.1
11-15 hours	19.4	18.5	20.3	19.0	25.5	10.9	26.3	7.1	16.7
16-20 hours	22.2	23.0	21.3	22.5	18.7	19.9	27.4	19.9	27.3
21-30 hours	18.7	20.3	16.9	19.8	9.7	20.7	16.9	11.1	9.2
31-40 hours	8.4	9.3	7.3	7.9	9.8	26.4	7.0	14.3	17.0
41 hours or more	1.6	2.0	1.2	1.6	0.4	3.0	0.8	7.3	6.8

[a] Percentages based on students who indicated that they had been employed.

TABLE 30

AVERAGE WEEKLY TAKE-HOME EARNINGS[a]

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
$1-49	57.8	51.0	65.2	58.2	60.2	42.2	44.8	47.0	40.0
$50-74	23.5	25.7	21.1	23.8	18.7	24.1	32.6	24.3	26.7
$75-99	12.1	14.2	9.8	12.1	10.9	22.5	12.8	16.3	10.9
$100-149	4.9	6.9	2.7	4.6	7.0	11.1	7.2	8.0	6.3
$150 or more	1.7	2.1	1.2	1.3	3.2	0	2.5	4.4	16.1

[a] Percentages based on students who indicated that they had been employed.

TABLE 31

WORK LOCATION BY SEX[a]

	1975-76			1976-77		
	Total	Men	Women	Total	Men	Women
Worked on campus	32.8	29.3	37.1	33.1	29.1	37.7
Worked off campus	67.2	70.7	62.9	66.9	70.9	62.3

[a] Percentages based on students who indicated that they had been employed.

TABLE 32

WORK LOCATION BY RACE[a]

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
1975-1976							
Worked on campus	32.8	30.6	56.1	26.1	36.6	34.3	38.8
Worked off campus	67.2	69.4	43.9	73.9	63.4	65.7	61.2
1976-1977							
Worked on campus	33.1	32.2	46.2	22.1	36.9	29.1	23.8
Worked off campus	66.9	67.8	53.8	77.9	63.1	70.9	76.2

[a] Percentages based on students who indicated that they had been employed.

TABLE 33

RELATEDNESS OF WORK TO FIELD OF STUDY[a]

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Closely related	15.3	14.4	16.3	15.3	15.0	6.0	11.0	24.7	18.1
Somewhat related	21.8	21.3	22.3	21.0	26.7	28.3	32.7	27.0	18.6
Not related	62.9	64.4	61.4	63.7	58.4	65.6	56.3	48.3	63.3

[a] Percentages based on students who indicated that they had been employed.

TABLE 34

JOB SATISFACTION[a]

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Very satisfied	30.5	31.0	29.9	31.1	25.5	28.7	18.8	32.9	29.4
Somewhat satisfied	39.3	35.7	43.3	39.7	34.7	30.1	40.9	46.8	34.5
No opinion	13.5	14.3	12.6	13.1	18.2	11.1	23.0	7.6	9.2
Somewhat dissatisfied	10.4	11.4	9.3	10.0	13.1	18.1	9.0	8.6	16.8
Very dissatisfied	6.3	7.6	4.9	6.0	8.6	12.0	8.3	4.1	10.2

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[a] Percentages based on students who indicated that they had been employed.

TABLE 35

CONCERN ABOUT FINANCING COLLEGE

Degree of Concern	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
None	37.5	42.5	31.8	39.8	20.1	26.3	31.9	26.0	19.4
Some	48.3	45.8	51.1	48.4	47.7	50.6	50.5	47.9	40.7
Major	14.2	11.6	17.1	11.8	32.2	23.1	17.6	26.1	40.0

TABLE 36

DESCRIPTORS OF FINANCIAL SITUATION BY SEX

	Total	Men	Women
Have major expenses or debts (medical, educational, etc.)	39.5	40.6	38.4
Contribute to the support of parent(s) or members of parental family	10.1	11.3	8.7
Parents have low income and cannot help with college expenses	23.3	23.5	23.1
Parents are not willing to help pay for college expenses	8.6	8.5	8.6
Head of household/single parent	4.9	3.9	6.2

TABLE 37

DESCRIPTORS OF FINANCIAL SITUATION BY RACE

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Have major expenses or debts (medical, educational, etc.)	39.5	39.7	39.0	43.7	33.0	38.9	34.5
Contribute to the support of parent(s) or members of parental family	10.1	9.2	14.9	6.8	8.5	28.9	27.5
Parents have low income and cannot help with college expenses	23.3	19.1	55.7	31.0	35.5	47.3	65.4
Parents are not willing to help pay for college expenses	8.6	8.7	6.9	14.3	10.2	9.5	5.1
Head of household/single parent	4.9	3.7	15.8	3.8	6.5	[illegible]5.6	9.8

TABLE 38

SOURCES HELPFUL IN DISCOVERING WAYS OF FINANCING COLLEGE BY SEX[a]

	Total	Men	Women
High school or college coaches	5.9	8.3	3.5
High school counselor	45.3	42.1	48.7
High school teacher	12.0	11.9	12.1
College admissions officer	17.2	18.0	16.4
College financial aid office staff	37.2	34.2	40.2
College teacher or adviser	7.7	9.0	6.3
College financial aid literature	30.7	31.0	30.3
Public advertising (radio, TV, posters)	7.5	7.9	7.0
Friends or other students	36.8	35.7	37.9
Family	45.3	44.5	46.2
Veteran's Administration office	2.6	3.4	1.8
Special services for disadvantaged students	1.5	1.5	1.4
Veteran's cost of instructional programs; Office of Veteran's Affairs	1.0	1.5	0.4
Special programs (Upward Bound, Talent Search, Educational Opportunity Program)	4.4	4.3	4.6

[a] Percentages based on students who received financial aid.

TABLE 39

SOURCES HELPFUL IN DISCOVERING WAYS OF FINANCING COLLEGE BY RACE[a]

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
High School or college coaches	5.9	5.3	9.6	11.3	1.9	3.4	11.9
High school counselors	45.3	44.2	51.8	57.5	41.4	40.7	55.4
High school teachers	12.0	10.3	19.1	17.5	10.6	26.6	24.8
College admissions officer	17.2	17.3	17.8	22.4	10.7	7.7	24.5
College financial aid office staff	37.2	36.7	37.7	50.4	29.8	38.7	55.3
College teacher or advisor	7.7	6.4	12.6	12.7	9.8	13.0	25.7
College financial aid literature	30.7	30.9	29.2	25.7	26.2	27.7	40.0
Public advertising (radio, T.V., posters)	7.5	6.0	16.4	7.5	4.9	10.4	10.8
Friends or other students	36.8	35.1	44.0	34.7	39.6	49.7	50.0
Family	45.3	48.5	31.3	44.2	38.4	29.3	16.2
Veteran's Administration Office	2.6	2.7	2.6	2.7	1.0	0	0.8
Special services for disadvantaged students	1.5	0.6	5.0	4.9	0.8	11.9	2.4
Veteran's cost of instructional programs; Office of Veteran's Affairs	1.0	0.8	2.2	0	0	0	0.4
Special programs (Upward Bound, Talent Search, Educational Opportunity Program)	4.4	2.5	16.2	6.9	5.5	3.8	8.9

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[a] Percentages based on students who received financial aid.

TABLE 40

PERCEPTIONS OF FINANCIAL AID APPLICATION PROCEDURE

	Total	Men	Women	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Very easy	7.0	6.5	7.6	6.5	10.4	8.0	3.2	19.7	10.5
Somewhat easy	10.3	10.0	10.5	8.9	21.2	11.8	16.6	20.6	12.5
Average	20.1	20.1	20.2	18.9	31.5	14.1	23.0	18.1	30.8
Somewhat difficult	20.0	21.1	18.6	20.1	17.6	22.0	22.3	19.3	27.3
Very difficult	7.4	6.6	8.3	7.3	8.1	14.0	6.5	4.9	8.0
Not applicable	35.2	35.6	34.7	38.2	11.4	29.7	28.5	17.5	10.9

TABLE 41

TYPE OF FINANCIAL AID PACKAGES AWARDED TO STUDENTS BY SEX

	Total		Men		Women	
	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77
Grant only	52.1	50.6	52.5	53.9	51.7	47.1
Loan only	7.6	8.3	8.3	6.6	7.0	10.0
Work-study only	2.4	3.7	2.8	4.0	2.1	3.5
Large grant, loan, and work-study	1.8	1.6	1.9	1.4	1.7	1.8
Small grant, loan, and work-study	6.7	6.9	5.9	6.3	7.5	7.5
Large grant and loan	4.6	4.0	4.3	4.5	4.9	3.5
Small grant and loan	14.4	12.0	15.6	12.8	13.2	11.3
Large grant and work-study	3.3	3.9	3.2	3.2	3.4	4.6
Small grant and work-study	6.1	7.5	4.9	6.4	7.4	8.7
Loan and work-study	0.9	1.5	0.5	1.0	1.3	2.0
Percent of students with aid	59.0	57.0	56.9	55.5	55.5	58.5

TABLE 42

TYPE OF FINANCIAL AID PACKAGES AWARDED TO STUDENTS BY RACE

	Total		White		Black		American Indian		Asian-American		Chicano		Puerto Rican	
	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977
Grant only	52.1	50.6	52.5	50.0	47.4	48.8	51.3	53.3	59.4	59.2	58.6	62.3	57.6	71.6
Loan only	7.6	8.3	8.7	9.6	2.5	2.2	10.3	5.8	2.1	3.1	5.7	3.5	2.5	0.1
Work-study only	2.4	3.7	2.7	4.2	0.7	1.1	3.7	3.0	5.4	4.8	1.5	0.2	2.2	2.3
Large grant, loan, and work-study	1.8	1.6	1.5	1.2	3.5	3.3	2.6	1.9	3.1	2.4	2.1	2.7	2.5	2.0
Small grant, loan and work-study	6.7	6.9	6.3	6.8	10.0	9.0	5.7	7.4	5.4	5.7	7.7	2.6	0.5	2.1
Large grant and loan	4.6	4.0	3.9	3.4	9.0	7.6	4.7	7.4	6.5	4.7	3.1	7.1	5.9	3.8
Small grant and loan	14.4	12.0	15.4	12.3	10.5	11.4	12.3	14.6	8.2	9.7	7.8	8.6	7.7	6.1
Large grant and work-study	3.3	3.9	2.7	3.6	6.1	5.6	3.9	4.2	4.7	5.6	2.8	1.6	8.5	5.8
Small grant and work-study	6.1	7.5	5.4	7.2	9.7	10.3	3.8	1.4	4.0	3.6	10.4	10.8	10.3	6.1
Loan and work-study	0.9	1.5	0.9	1.7	0.5	0.6	1.8	1.1	1.2	1.1	0.4	0.6	2.2	0
Percent of students with aid	59.0	57.0	55.2	53.4	89.7	87.2	59.3	54.7	63.7	65.5	83.2	82.3	83.6	88.4

TABLE 43

TYPE OF FINANCIAL AID AWARDED TO STUDENTS BY SEX[a]

1975-1976

	Total	Men	Women
Parental support	60.6	58.2	63.2
Tuition waiver	13.3	13.6	13.0
BEOG	42.1	41.2	43.0
SEOG	8.1	8.0	8.1
State scholarship or grant	28.4	25.9	30.9
Local or private scholarship	25.7	25.3	26.1
Vocational grant	2.6	2.9	2.1
Other grant	9.2	6.9	11.5
FISL or GSLP	9.6	10.6	8.6
NDSL	21.4	21.1	21.6
Other loan	7.4	7.3	7.6
College Work-Study	21.2	19.2	23.3
GI benefits	4.8	5.6	4.0
Social Security Dependents benefits	14.3	12.3	16.5

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[a] Percentages based on students who received financial aid.

TABLE 44

TYPE OF FINANCIAL AID AWARDED TO STUDENTS BY SEX[a]

1976-1977

	Total	Men	Women
Parental support	60.5	58.7	62.5
Tuition waiver	12.8	13.1	12.6
BEOG	40.4	40.7	40.0
SEOG	8.6	8.7	8.5
State scholarship or grant	28.5	29.0	28.0
Local or private scholarship	18.1	16.8	19.4
Vocational grant	1.6	1.9	1.2
Other grant	8.9	7.5	10.4
FISL or GSLP	10.4	11.6	9.2
NDSL	18.2	16.3	20.3
Other loan	8.1	6.2	10.0
College Work-Study	25.1	22.2	28.1
GI benefits	5.4	6.3	4.4
Social Security Dependents benefits	16.4	13.8	19.1

[a] Percentages based on students who received financial aid.

TABLE 45

TYPE OF FINANCIAL AID AWARDED TO STUDENTS BY RACE[a]

1975-1976

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Parental support	60.6	64.1	44.3	60.3	62.8	41.4	28.4
Tuition waiver	13.3	12.3	18.5	10.3	19.4	16.0	17.1
BEOG	42.1	34.5	80.1	48.0	55.3	67.6	82.9
SEOG	8.1	6.2	9.8	7.5	6.4	8.1	12.0
State scholarship or grant	28.4	31.0	14.8	23.4	32.2	19.1	11.4
Local or private scholarship	25.7	28.3	12.8	26.8	22.1	16.9	11.6
Vocational grant	2.6	2.8	1.0	1.5	1.2	2.9	1.1
Other grant	9.2	9.7	5.8	7.8	6.7	3.9	19.6
FISL or GSLP	9.6	10.7	5.4	8.9	4.9	2.6	3.3
NDSL	21.4	20.4	29.1	22.5	16.9	18.5	14.7
Other loan	7.4	8.2	3.3	8.5	7.8	6.1	5.2
College Work-Study	21.2	19.5	30.5	21.5	23.8	24.8	26.2
GI benefits	4.8	4.7	6.2	2.4	6.3	4.1	0.8
Social Security Dependents benefits	14.3	14.3	15.5	12.2	9.6	10.5	13.9

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[a] Percentages based on students who received financial aid.

TABLE 46

TYPE OF FINANCIAL AID AWARDED TO STUDENTS BY RACE[a] 1976-1977

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Parental support	60.5	64.0	44.8	60.5	64.1	34.6	26.0
Tuition waiver	12.8	12.1	16.3	8.4	17.9	10.4	29.6
BEOG	40.4	32.4	82.9	43.6	50.9	65.7	88.4
SEOG	8.6	6.8	20.4	10.8	5.0	7.4	17.6
State scholarship or grant	28.8	30.7	16.4	29.7	29.9	23.4	13.1
Local or private scholarship	18.1	19.6	9.9	23.7	13.7	14.8	9.1
Vocational grant	1.6	1.7	0.6	2.6	0.2	1.0	0.9
Other grant	8.9	9.3	5.3	7.9	12.6	4.0	20.6
FISL or GSLP	10.4	11.5	5.7	12.8	7.6	1.7	2.9
NDSL	18.2	17.4	25.3	20.5	14.2	16.9	7.4
Other loan	8.1	8.7	4.6	10.7	7.8	6.7	4.2
College Work-Study	25.1	24.7	29.9	18.8	23.2	18.6	18.4
GI benefits	5.4	5.3	4.8	2.9	6.4	13.8	0.9
Social Security Dependents benefits	16.4	16.5	17.4	12.4	8.9	15.0	19.4

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[a] Percentages based on students who received financial aid.

TABLE 47

AVERAGE AMOUNT OF FINANCIAL AID BY SEX[a]

(In Dollars)

Type of Institution	Total	Men	Women
Public university	$1440[b]	$1493	$1387
	1476	1510	1440
Private university	2353	2377	2314
	2243	2293	2169
Public four-year college	1474	1461	1486
	1479	1463	1495
Private four-year college	2178	2135	2226
	2128	2074	2185
Two-year college	1251	1110	1396
	1328	1198	1460
Predominantly black institution	1844	1809	1880
	1849	1830	1865

[a] Percentages based on students who received financial aid.

[b] First value for 1975-76; second value for 1976-77.

TABLE 48

AVERAGE AMOUNT OF FINANCIAL AID BY RACE[a]

(In Dollars)

Type of Institution	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Public university	$1440[b]	$1376	$1854	$1611	$1617	$2043	$1585
	1476	1427	1809	1689	1534	1791	1397
Private university	2353	2257	3153	3450	3167	3314	3945
	2243	2139	3116	3587	3185	3273	3634
Public four-year college	1473	1410	1906	1288	1424	2377	1633
	1479	1423	1845	1146	1303	2003	1803
Private four-year college	2178	2134	2702	2662	2321	2941	2659
	2128	2084	2654	2535	2400	2687	2792
Two-year college	1251	1263	1247	1368	990	976	1538
	1328	1343	1307	1573	1058	1093	1622
Predominantly black institution	1844	0	1846	2372	*	*	*
	1849	0	1851	2338	*	*	*

[a] Percentages based on students who received financial aid.

[b] First value for 1975-76; second value for 1976-77.

*N too small to be meaningful.

TABLE 49

STUDENT EXPERIENCES WITH FINANCIAL AID BY SEX[a]

	Total	Men	Women
Lost aid because dropped out of school	5.7	5.8	5.5
Parents didn't want to complete financial statement	6.4	5.3	7.6
Didn't think I was eligible for financial aid	16.0	16.2	15.8
Grades were too low to receive financial aid	2.2	3.0	1.3
Income status was too high to receive financial aid	23.5	23.0	24.0
Financial aid enabled me to attend school	45.2	44.3	46.2
Could not get aid because enrolled part-time	1.2	1.2	1.2
Consider myself financially independent of my parents	12.2	12.9	11.5
Did not apply for financial aid in time	4.0	3.9	4.1
Did not apply for financial aid	9.3	10.6	7.9
Financial aid application forms and procedures were too long or complicated for me to complete	2.6	2.9	2.3
Experiences with financial aid have generally been favorable	40.2	38.7	41.8
Didn't know about financial aid options	5.7	5.9	5.4
I was turned down for financial aid	20.0	21.0	18.8
Couldn't get type of aid I wanted	9.3	8.9	9.8
Didn't want to get further into debt	6.8	7.0	6.6
Different type of aid would have been better for me	4.8	4.9	4.6
Parents did not want to pay any more for my education	5.9	5.6	6.2
Experiences with financial aid has been generally unfavorable	18.8	21.7	15.6

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[a] Percentages based on students who received financial aid.

TABLE 50

STUDENT EXPERIENCES WITH FINANCIAL AID BY RACE[a]

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Lost aid because dropped out of school	5.7	5.3	7.5	7.4	6.1	8.3	6.6
Parents didn't want to complete financial statement	6.4	7.1	3.0	11.4	6.4	2.5	0.8
Didn't think I was eligible for financial aid	16.0	17.2	8.4	13.8	17.4	19.1	6.3
Grades were too low to receive financial aid	2.2	1.8	4.2	2.8	1.0	3.8	1.6
Income status was too high to receive financial aid	23.5	25.9	10.9	27.5	19.3	11.7	10.8
Financial aid enabled me to attend school	45.2	42.6	58.0	64.5	42.2	56.3	61.9
Could not get aid because enrolled part-time	1.2	1.2	0.8	0.3	3.0	0.0	1.5
Consider myself financially independent of my parents	12.2	11.8	13.1	20.7	18.1	11.3	19.9
Did not apply for financial aid in time	4.0	3.8	5.6	5.8	8.1	1.4	4.8
Did not apply for financial aid	9.3	10.3	4.1	5.0	13.2	4.4	4.6
Financial aid application forms and procedures were too long or complicated for me to complete	2.6	2.4	2.1	0.8	17.9	3.8	4.3
Experiences with financial aid have generally been favorable	40.2	38.3	50.8	49.8	35.1	34.4	62.8
Didn't know about financial aid options	5.7	5.0	7.5	3.7	12.9	17.9	3.8
I was turned down for financial aid	20.0	21.7	11.5	23.2	17.2	13.9	4.7
Couldn't get type of aid I wanted	9.3	9.0	11.4	16.8	11.6	6.1	10.3
Didn't want to get further into debt	6.8	6.7	7.5	10.3	6.1	5.0	7.2
Different type of aid would have been better for me	4.8	4.3	7.3	4.5	9.2	3.2	8.6
Parents did not want to pay any more for my education	5.9	6.2	4.0	7.0	10.7	2.2	6.4
Experiences with financial aid have been generally unfavorable	18.8	20.1	11.9	22.1	15.4	8.9	17.0

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[a] Percentages based on students who received financial aid.

TABLE 51

STUDENT SATISFACTION WITH ASPECTS OF COLLEGE BY SEX[a]

	Total	Men	Women
Orientation for new students	74.7	73.2	76.4
Registration	63.3	63.9	62.6
Distribution of grade reports	86.2	86.3	86.1
Distribution of transcripts	79.3	80.6	77.8
Financial aid	48.9	46.4	51.8
Academic advisement	56.1	55.3	57.0
Career counseling	51.2	50.9	51.5
Personal counseling	60.0	58.1	62.3
Tutoring or remedial program	73.4	73.4	73.5
Child care facilities	68.9	67.8	69.7
Health services	70.4	76.5	64.1
Job placement	58.7	61.7	55.5
Campus security	69.9	70.2	69.6
On-campus housing	67.2	62.8	72.0
Parking service	37.9	38.5	37.3
Financial aid advice	53.4	50.0	57.2
Extracurricular activities	84.1	85.1	83.1
Social life (dating, parties, etc.)	79.3	78.9	79.8
Course work	85.2	83.5	87.2
Reading and study skills lab	79.0	76.7	81.8
Special instructional media	77.4	72.5	83.0
Independent study	82.2	77.9	86.8
Honors program	79.2	79.3	79.2
Cooperative work program	72.7	65.5	80.9
Assistance in finding housing	56.0	55.0	57.0
Assistance in finding part-time work	51.4	49.5	53.1
Ethnic studies	68.1	69.8	66.8
Women's studies	67.1	64.3	67.9

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[a] Ns based on students who found item applicable. The majority of students found "child care facilities" and the last eight items not applicable, so these percentages are based on small Ns.

TABLE 52

STUDENT SATISFACTION WITH ASPECTS OF COLLEGE BY RACE[a]

	Total	White	Black	American Indian	Asian-American	Chicano	Puerto Rican
Orientation for new students	74.7	74.6	77.6	72.3	75.5	73.6	67.4
Registration	63.3	64.0	54.2	64.2	64.0	71.9	60.6
Distribution of grade reports	86.2	87.8	72.6	84.1	76.1	87.9	72.8
Distribution of transcripts	79.3	80.5	68.6	74.5	70.1	84.3	72.8
Financial aid	48.9	47.4	53.7	45.2	60.1	76.2	58.5
Academic advisement	56.1	55.9	61.0	52.1	44.1	54.6	48.0
Career counseling	51.2	51.0	54.1	49.2	42.1	47.9	54.7
Personal counseling	60.0	60.0	61.7	50.3	41.7	65.1	58.0
Tutoring or remedial program	73.4	75.7	64.9	64.4	64.4	60.0	63.1
Child care facilities	68.9	72.4	56.6	59.3	67.3	95.7	59.6
Health services	70.4	70.9	66.3	67.4	64.6	78.9	58.7
Job placement	58.7	60.3	49.9	54.4	58.5	59.5	38.9
Campus security	69.9	70.3	65.1	75.3	66.3	74.0	72.5
On-campus housing	67.2	68.6	54.2	59.6	62.7	48.3	50.1
Parking service	37.9	37.9	38.1	46.6	27.5	50.3	18.5
Financial aid advice	53.4	52.7	55.8	54.9	48.2	75.0	49.7
Extracurricular activities	84.1	85.4	73.2	89.6	71.4	76.6	72.2
Social life (dating, parties, etc.)	79.3	80.4	70.5	83.5	64.6	72.6	73.2
Course work	85.2	85.9	78.8	83.7	74.5	86.3	82.2
Reading and study skills	79.0	79.2	78.3	78.2	62.0	86.4	80.1
Special instructional media	77.4	78.3	68.7	82.5	69.8	86.2	66.1
Independent study	82.2	83.2	77.3	73.3	74.9	85.2	65.0
Honors program	79.2	80.7	71.7	68.2	78.4	66.6	69.5
Cooperative work program	72.7	74.3	64.5	74.0	62.8	80.2	60.7
Assistance in finding housing	56.0	57.3	45.5	58.3	50.7	64.4	27.4
Assistance in finding part-time work	51.4	53.7	36.0	36.1	63.6	65.2	32.3
Ethnic studies	68.1	72.5	57.1	42.5	65.0	58.9	63.4
Women's studies	67.1	70.8	52.3	53.9	58.6	53.4	41.2

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[a] Ns based on students who found item applicable.

CHAPTER 4

CHARACTERISTICS OF STUDENTS WITH DIFFERENT PATTERNS OF PERSISTENCE IN COLLEGE

As was mentioned in Chapter 2 (p. 27), four criterion groups were developed for this study. A brief description of each is in order here.

The full-time persisters (N=973,806) were students who attended college full time during the two academic years under consideration and who were enrolled full time at the beginning of their third year in fall 1977.

The erratic persisters (N=183,497) were the least clear-cut group, being composed of students who did not attend college on a full-time basis but who also did not drop out completely for any period. This group consisted of those students who did not respond fully to item #1 on the follow-up questionnaire, which asked about their enrollment status for each month of their first two college years, as well as those students who moved from full-time to part-time status or vice versa. All students in this group, however, reported that they were enrolled either full or part time in fall 1977.

The stopouts (N=76,710) were respondents who reported that they were not enrolled in college during at least one of the five-month periods of February-June 1976, September 1976-January 1977, or February-June 1977, but who were back in school on either a part- or a full-time basis in fall 1977.

The withdrawals (N=289,259) are students who were not enrolled in fall 1977 and whose initial degree aspirations were higher than an associate degree, whether they had earned that degree or not. Obviously, the fall 1977 date is arbitrary, being dictated by the time constraints of the study. If the study had been done a year later, some of these respondents would probably have returned to school and thus would be considered stopouts rather than withdrawals.

As was mentioned in Chapter 2, a small group of respondents had as freshmen aspired no higher than an associate degree, had received that degree by the time of the follow-up, were not reenrolled at the time of the follow-up, and thus maybe said to have completed their college education; this group was excluded from the analyses.

To summarize: Full-time persisters constitute the largest of the four criterion groups, followed by withdrawals, then erratic persisters. The number of stopouts was relatively small.

Table 53 shows how students with different demographic characteristics (sex, race/ethnicity, age at matriculation) were distributed among the four criterion groups, and Table 54 shows the demographic composition of each of the four criterion groups.

"Atypical" students who began college on a full-time basis in fall 1975 were generally less likely to be full-time persisters than were more "traditional" students. Men were somewhat more likely than women to be full-time persisters and stopouts. Asian-Americans, whites, and blacks were far more likely to persist full time than were Chicanos and Puerto Ricans: Over two in five of the former and almost one in three of the latter were classified as withdrawals. One in four American Indians also belonged in this category. Asian-Americans had a propensity to be erratic persisters. Respondents who were age 20 or older when they entered college were far less likely than younger freshmen to be full-time persisters, although there appears to be a curvilinear effect, with traditional-aged students (17-19 years old) being most likely to belong to this group, older respondents (20-29 years old) being most likely to withdraw, and those who had entered college at age 30 or over managing to stay in school but often on less than a full-time basis.

Thus, in the discussion that follows, the reader should bear in mind that full-time persisters include relatively large proportions of men, whites, and students 19 years of age and younger; the erratic persisters include relatively large proportions of Asian-Americans and students age 30 and over; the stopouts include relatively large proportions of blacks, Chicanos, and students who began college when they were age 26-29; and the withdrawals include relatively large proportions of Chicanos, Puerto Ricans, and respondents who entered college at age 20 or older. These differences in sex, race/ethnicity, and age help explain some of the differences among the criterion groups that are described in the remainder of this chapter.

Religion and Political Orientation

Table 55 shows the composition of the four criterion groups with respect to religion and political ideology as reported on the freshman questionnaire. Some of the differences in religion may be accounted for by race/ethnicity; for instance, the large proportion of Roman Catholics who were stopouts or withdrawals can be explained in part by the large proportions of Chicanos and Puerto Ricans who come from this religious background. Similarly, the high proportion of respondents claiming "other" religions who were erratic persisters is probably attributable to the large proportion of Asian-Americans in both groups. Being Jewish is clearly related to full-time persistence in college, though a relatively large proportion of Jews were also among the stopouts.

The respondent's political orientation was not closely related to whether he or she persisted on a full-time basis or withdrew entirely. It did, however, bear some relation to other behaviors: Those who were liberal or far left were more likely to stop out, whereas those who were middle-of-the-road or far right often chose to remain in school on a less-than-full-time basis. Conservatives tended to be full-time persisters; relatively few were erratic persisters or stopouts.

Parental Income and Education

As Table 56 shows, students whose parents had incomes of $10,000 or less a year were the most likely to withdraw, while those from families with incomes above $30,000 were most likely to persist full time. Those from middle-income families ($10,001-$30,000) a year were most likely to be either stopouts or erratic persisters. The cross-tabulations cannot tell us whether income is causally linked to persistence, but the results are suggestive.

Similarly, parental education and student persistence were strongly related: The more highly educated the parents, the more likely the student was to be a full-time persister. One item of interest is that students whose parents had attended a postsecondary school other than college were less likely to withdraw than were students whose parents had attended college without graduating.

Preparation and Academic Achievement

Full-time persisters were somewhat more likely than others to feel that high school had prepared them very well in mathematical skills and, to a lesser extent, in reading and composition, foreign languages, and study habits (Table 57). On the whole, stopouts were more likely than full-time persisters to feel they had been well prepared in reading and composition, history and the social sciences, vocational skills, and study habits. Of all the criterion groups, erratic persisters were least likely to feel well prepared in reading and composition, whereas withdrawals tended to believe that high school had not given them good preparation in math and study habits.

The full-time persisters made the best grades in high school and had the highest SAT scores, whereas the withdrawals had the lowest high school grades and test scores (Table 58). The picture is more confused for the stopouts and the erratic persisters; the stopouts made slightly lower grades in high school than the erratic persisters, but the test scores of the two groups were about the same.

As Table 59 shows, the full-time persisters got the best college grades, and the stopouts the worst (54 percent of the full-time persisters earned a B average or better, compared with 39 percent of the stopouts). Very few respondents reported college grade averages of D or lower. It is interesting to note that those who had attended institutions which did not give letter grades were overrepresented among the withdrawals and, to a lesser extent, among the stopouts.

Degree Plans, Intended Majors, and Career Plans

The degree to which a student aspired at the time he or she entered college seems to be related to future persistence behavior, particularly if that degree was something other than a bachelor's or a master's (Table 60). Aspiring to no more than an associate degree was associated with dropping out, while aspiring to an advanced degree was associated with persistence, especially if the degree was in the medical professions (M.D., D.O., D.D.S., D.V.M.). Students aspiring to a divinity degree had a strong tendency to be stopouts.

Although a student's intended major at the time he or she enters college appears to be related to future persistence behavior, the pattern that emerges from the data is by no means clear-cut. Those who as freshmen planned to major in biological sciences, education, history or political science, and math or statistics tended to be full-time persisters, whereas those planning to major in agriculture, social sciences, and "other" technical or nontechnical fields tended to be withdrawals. Overrepresented among the stopouts were those who as freshmen intended to major in engineering, humanities, fine arts, and "other" technical fields and those who were undecided about their college majors. The erratic persisters included relatively large proportions of those planning majors in business or the health professions. The latter relation (a planned major in the health professions and erratic persistence) may be a function of attending a two-year college, where most health professional programs are located and where large proportions of students are enrolled on a part-time basis.

The freshman career plans of the sample were consistent with their degree plans and intended majors (Table 61). Respondents planning on business careers were much less likely, and those intending to go into the clergy or other religious work much more likely, to stop out. Students planning to become doctors, lawyers, college professors, or research scientists were more likely to persist full time. The finding that students intending to become health professionals were somewhat more likely to persist full time seems to be at variance with the previously mentioned finding that those intending to major in the health professions were likely to be erratic persisters. The discrepancy may be explained by the additional finding that those intending to be nurses were highly overrepresented among erratic persisters; apparently those planning careers in other health professional fields were less likely to manifest this tendency, although they were likely to stop out during their second year.

Many students had changed their career plans by the time of the follow-up. More were planning careers in business, the clergy or religious work, college or university teaching, elementary or secondary school teaching, and scientific research. Concomitantly, fewer students were planning to become doctors, farmers or foresters, health professionals, lawyers, and nurses. The proportion of respondents planning careers as artists or performers and as engineers remained about the same, as did the number indicating "other" career choices. The number who were undecided about their future careers dropped among the full-time persisters but increased in the other three criterion groups.

College Experiences and Satisfactions

Place of residence varied considerably according to criterion group (Table 62). In both the first and second college years, full-time persisters were far more likely than the others to live in college dormitories, whereas erratic persisters, withdrawals, and especially stopouts were far more likely to live with parents or relatives. The proportion of those living in dorms dropped between the first and second year for every group, but there were variations in where they moved. The full-time persisters tended to move into private apartments or into fraternities and sororities; the erratic persisters were likely to live with parents or relatives, with their spouse, or in private apartments during the second year, though many also moved into "other" living arrangements; the stopouts moved back home with their parents, into private apartments, or into fraternities and sororities; and the withdrawals were much more likely to be living with spouses and somewhat more likely to be living with parents during the second year.

Table 63 gives an overview of the experiences that different groups had while in college. Stopouts and withdrawals were much more likely to manifest psychological despondency and to have negative academic experiences: For instance, unusually large proportions of stopouts said they had trouble concentrating while studying, that they were not very interested in any of their courses, and that they had failed at least one course, whereas unusually large proportions of withdrawals said they felt bored much of the time, were not interested in their courses, and had trouble fitting their programs to their academic and professional interests. Both groups were relatively unlikely to report experiences indicative of involvement in collegiate life. Full-time persisters, on the other hand, were much more likely than other groups to participate in sports, student government, and special-interest clubs; to be elected to a scholastic honor society or join a fraternity or sorority; to tutor or study with other students; to be a guest in a teacher's or administrator's home; to call a teacher or administrator by his or her first name; to vote in a student election; to engage in musical activities; and to take part in organized student demonstrations. They were also much more likely than others to say that it was very important to them to complete their original degree plans. In short, their involvement in college was high. It should be remembered, however, that full-time persisters were also more likely to live on campus, and to also have attended college for two full years, thus having greater opportunities for such involvement. Erratic persisters were more likely than others to change major fields or career choice; to receive encouragement from family and friends to stay in school; and to participate in plays, art competitions, or literary activities.

Table 64 reports on student satisfaction with various college services, though it should be pointed out that many students had had no experience with some of the services listed and thus checked "not applicable" in connection with those items. The different criterion groups had roughly similar feelings about many of the more mundane aspects of college such as registration, orientation for new students, and the distribution of grade reports; but about other aspects, opinions varied widely. With respect both to financial aid and financial aid advice, the stopouts were by far the most dissatisfied and the withdrawals the most satisfied; this finding is difficult to interpret, though it may be connected with the amount of financial aid they receive relative to their need, since stopouts tended to come from slightly more affluent families and thus to be less likely to qualify for some kinds of financial aid. Indeed, generally speaking, stopouts seemed to be a more dissatisfied lot than withdrawals. Full-time persisters were more likely than others to be satisfied with various academic aspects of college life such as course work, special instructional media, and independent study. Interestingly almost three in four full-time persisters expressed satisfaction with child care facilities, compared with slightly over half the erratic persisters, suggesting that institutions which offer such services make it far easier for people with children to persist in college on a full-time basis. Another interesting finding is that stopouts were much more likely to express satisfaction with ethnic studies and women's studies, indicating perhaps a greater involvement in these areas than other students have.

Values and Attitudes

The 1975 freshman questionnaire asked students to indicate how important various life goals were to them. Overall, the most valued goals were "becoming an authority in my field," "helping others who are in difficulty," "developing a meaningful philosophy of life," and "raising a family," endorsed by over half of each criterion group (Table 65). Full-time persisters tended to give high priority to fairly modest goals such as having administrative responsibility over the work of others, participating in community action programs, and keeping up-to-date with political affairs. Both erratic persisters and stopouts were characterized by giving high priority to only a few goals. Thus, relatively small proportions of the former said they wanted to have administrative responsibility, to be very well-off financially, to make a theoretical contribution to science, or to keep up-to-date with politics, though they were more likely than other groups to want to write original works and create artistic works. Stopouts tended to place little value on becoming accomplished in a performing art, winning recognition from colleagues for contributions to their special field, influencing the political structure or social values, being successful in their own business, participating in community action programs, or keeping up-to-date politically, though they were more likely than others to value both financial success and service to others. Withdrawals tended to report unrealistically high goals such as winning recognition for special contributions to their field, making a theoretical contribution to science, and being successful in their own business. It is possible that setting such high goals leads to feelings of frustration that eventually cause the student to give up and drop out of college entirely.

The follow-up questionnaire asked students about their reasons for going to college (item #12), their self-ratings on a variety of traits (item #20), and their reasons for their long-term career choice (item #28). It is important to remember that, in answering these questions, the student either had already been in college for two years or had withdrawn at some point and that these behaviors may have influenced his or her responses.

The most common reasons for going on to college, cited by at least two in three of the total group, were "to get a job in my chosen field," "I always expected to go to college," and "to learn more about things that interest me" (Table 66). Somewhat fewer stopouts and withdrawals said they had always expected to go to college, but on the two other items, the proportions were about the same for the four criterion groups. Full-time persisters were more likely, and withdrawals less likely, to cite preparation for graduate or professional school as a reason for attending college. Both stopouts and withdrawals were relatively unlikely to say that their parents or family wanted them to go to college. Otherwise, the reasons mentioned by withdrawals tended to be rather negative: "There was nothing better to do" and "could not find a job." Larger proportions of erratic persisters than others said they attended college to get a job, and smaller proportions came to college to gain a general knowledge and appreciation of ideas, to meet new and interesting people, or to contribute more to their communities.

Stopouts were far more likely than others, and withdrawals less likely, to mention a desire to make more money as an important reason for coming to college.

A student's self-concept can play a major role in his or her success in college, in career, and even in interpersonal relations. Respondents were asked to rate themselves as above average, average, or below average on 17 traits. As a whole, they gave themselves the highest ratings on determination, understanding of others, and motivation to achieve (Table 67). Comparing the four criterion groups, we find that full-time persisters had the most positive self-images, being more likely than others to rate themselves above average on academic ability, motivation to achieve, leadership ability, mathematical ability, originality, intellectual self-confidence, public speaking ability, athletic ability, and determination; interestingly, they were less likely than others to feel they had above-average mechanical ability. Withdrawals had rather negative self-images, tending to rate themselves as no more than average in academic and mathematical ability; they were also less likely than others to see themselves as physically attractive and popular with the opposite sex, but they were inclined to give themselves high ratings on mechanical, writing, and artistic ability. Stopouts were especially likely to rate themselves low on motivation to achieve, social and intellectual self-confidence, understanding of others, and determination; indeed, on no trait were they the top-ranked group. Erratic persisters had fairly positive self-images, especially with respect to understanding of others and physical attractiveness, though they were somewhat less inclined than others to see themselves as outstanding in motivation to achieve or leadership ability.

Overall, nine in ten respondents, but slightly smaller proportions of stopouts and withdrawals, said that interest in the field was a very important reason for their career choice (Table 68). Other common reasons were the chance to use one's training or schooling (cited by 72 percent of the erratic persisters but only 53 percent of the withdrawals) and the chance to be helpful to others (cited by 64 percent of the full-time persisters but only 52 percent of the stopouts). Generally, the full-time persisters were most distinctive in their work values, whereas the other three criterion groups tended to hold similar values. Other reasons that the full-time persisters were more likely than others to mention were the chance to work with ideas, to contribute to society, and to exercise leadership; relatively few mentioned good pay, career advancement, or fringe benefits. The erratic persisters were most likely of any group to mention the chance for steady progress and to work with people one likes as reasons for their career choice; the stopouts were notable for giving little value to availability of job openings, the chance for steady progress, the opportunity to work with ideas and to be helpful to others, and the chance to learn new skills, but both they and the withdrawals put a high premium on good pay and good fringe benefits. Other reasons common among the withdrawals were availability of job openings, chance for rapid career advancement, avoidance of pressure, and the chance to learn new skills. They were also most likely to say that the career was not too difficult to prepare for, did not require much education beyond high school, and "I can get into a program that does not cost too much."

It is possible that the full-time persisters were less likely to mention such extrinsic factors as good pay and the chance for rapid advancement or steady progress because they assumed that, as college graduates, they could get jobs that offered these advantages; therefore, they felt free to concentrate on intrinsic factors. On the other hand, in light of the current widespread publicity about the declining value of a college education, it is possible that the full-time persisters really did value intrinsic work factors more than did the other groups.

Financial Situation and Financial Aid

Previous research (Astin, 1975) indicates that the way college students feel about their financial situation, as well as the type of financial aid they receive, affects their persistence. In this section, we will discuss student concerns about their ability to finance their education, factors bearing on their financial situation, the type and amount of financial aid they receive, and their feelings about their experiences with financial aid.

The freshman survey asked students to indicate the degree of concern they felt over their ability to finance their college education. Overall, more than one in three expressed no concern, close to one half expressed some concern, and 15 percent said that finances were a major concern (Table 69). Withdrawals were most likely to express major concern, followed by stopouts. The groups differed very little, however, with respect to the proportions expressing no concern. Apparently, feeling major concern over finances was related to withdrawing from school, but feeling no concern was not particularly related to persisting.

The follow-up questionnaire included an item (#8) consisting of five statements about financial situations hypothesized to be related to persistence. Two of these situations turned out not to be connected with persistence: As Table 70 shows, approximately equal proportions of each group had major expenses or debts (mentioned by about two in five respondents) and said their parents had low incomes and so could not help them with college expenses (mentioned by about one in four). The three other statements were related to persistence in that they were mentioned much less frequently by full-time persisters than by other groups: being the head of a household or a single parent (most often mentioned by withdrawals); having to contribute to the support of parents (mentioned equally often by stopouts and withdrawals); and having parents who were unwilling to help pay college expenses (mentioned most often by erratic persisters). The most interesting point here is that students with parents too poor to help them were not affected, whereas students with parents unwilling to help them were affected, suggesting that perceived psychological support may play an important role in encouraging persistence.

The amount of financial aid a student receives is a function both of the income of the student's parents and of the cost of the institution that the student attends. Overall, 58 percent of the students reported receiving some kind of financial aid (Table 71). Stopouts were least likely to get financial aid, and withdrawals most likely, though they received by far the smallest amounts. Over twice as many full-time persisters as withdrawals received over $4,000 in aid during their first year, probably because the full-time persisters tended to enroll in more expensive institutions. During the 1975-76 academic year, stopouts received larger amounts of aid than erratic persisters.

In the 1976-77 academic year, withdrawals and full-time persisters were slightly more likely than the other two criterion groups to get some kind of aid. The amount of aid received by full-time persisters and withdrawals rose slightly, the amount received by the erratic persisters decreased slightly, and the amount received by the stopouts dropped sharply.

Table 72 indicates the way that financial aid was packaged. The majority of students in all four criterion groups received all their aid in the form of grants. The withdrawals were slightly more likely, and the full-time persisters slightly less likely, to have only a grant. The second most common form of aid was a small grant and a loan, and the third most common form was a loan only. The least common form was a package consisting of a loan and work-study, though about twice as many withdrawals as other students got aid in this form. The rank-order of the various forms of aid was essentially the same in the second year, with fully half of all aid students receiving only a grant.

Looking more closely at the specific types of aid that students received, we find that three in five students overall received some support from their parents, with full-time persisters most likely and withdrawals least likely to get such help (Table 73). With respect to outside sources of support, the largest proportion of students in all groups--ranging from 35 percent of the stopouts to 55 percent of the withdrawals--received a BEOG. Withdrawals were relatively unlikely to receive SEOG funds, local or private scholarships and grants, or "other" grants. Full-time persisters were most likely to get an SEOG, a state scholarship or grant, or a local or private scholarship or grant. These patterns may reflect the types of institutions that the different groups attended.

One item on the follow-up questionnaire (#26) queried students about their experiences with and their attitudes toward financial aid. As Table 74 indicates, close to half of all aided students (ranging from 38 percent of the erratic persisters to 50 percent of the withdrawals) said that aid had enabled them to attend college. The next most commonly endorsed statement was "My experiences with financial aid have generally been favorable," but differences among the groups in their responses were striking: About two in five full-time persisters and withdrawals, but only one in three erratic persisters and one in four stopouts, reported favorable experiences. Conversely, stopouts were most likely and withdrawals least likely to report generally unfavorable experiences with financial aid; however, close to one in four full-time persisters and 18 percent of the erratic persisters also indicated they had had unfavorable experiences.

Some of the responses shown in the table are rather curious, raising questions about just how the students interpreted the statements and just what financial aid means to them. For instance, although all of these students had received some kind of financial aid at some time, close to one in four said that their income status was too high to qualify them for financial aid, and one in five said that they had been turned down for financial aid. The most obvious explanation for these apparent anomalies is that the students who gave such responses had loans or work-study rather than grants and that they did not regard these as financial aid. The same may be true of GI benefits and Social Security Dependent's benefits. Another possibility is that students may have received financial aid the first year but not the second or vice versa. In short, the responses indicate a certain amount of confusion about what is indeed a very confusing subject.

The follow-up questionnaire asked respondents to indicate the total amount of their indebtedness and the maximum amount they would be willing to incur for their undergraduate education. As Table 75 shows, almost two in three students said that they had no loan indebtedness, and 38 percent said they were unwilling to do into debt. Of the four criterion groups, the full-time persisters were much more likely than the others to be fairly heavily in debt: 6.1 percent said their current indebtedness was over $4,000 while almost one in six claimed debts of over $2,000.

Work Experiences

Most students work at some point while attending college, and the type of work they do, the location of that work, and the hours they put in may affect their persistence in college. For instance, Astin (1975) found that students who work more than 20 hours a week are less likely to persist. As Table 76 shows, about 55 percent of the total sample reported that they had worked during the first two college years; the range was from just over half of the full-time persisters to close to two-thirds of the stopouts. Moreover, of those students who worked, the great majority worked less than 20 hours per week. Full-time persisters tended to work the fewest number of hours, and stopouts the most. Accordingly, full-time persisters tended to earn the smallest amount of money, whereas stopouts were the most likely to make $100 or more per week.

According to Astin (1975), students who have on-campus jobs are more likely to persist than those who work off campus. Our data show that full-time persisters were the most likely of the four groups to work on campus, holding such typical students jobs as athletic assistant, food service worker, library aide, research assistant, and tutor. Stopouts were the most likely to work off-campus, usually in such semiskilled jobs as cashier/checker, driver, grounds or buildings maintenance worker, mechanic, salesperson, and switchboard operator. Only about one in four erratic persisters and withdrawals had on-campus jobs during the first year, and only one in five during the second year. Generally, the kinds of jobs held by withdrawals were similar to those held by full-time persisters, and the kinds of jobs held by erratic persisters were similar to those held by stopouts.

Stopouts were least likely to say that their jobs were closely related to their field of study and least likely to be very satisfied with their jobs, whereas about one in three full-time persisters and erratic persisters expressed great satisfaction with their jobs. They were also most likely to say they worked at a job closely related to their field of study. Withdrawals fell somewhere in the middle with respect to job relatedness and job satisfaction.

Institutional Characteristics

Table 77 indicates the proportions of students entering different kinds of institutions in fall 1975. Respondents from all groups except withdrawals were most likely to have started at a four-year college; two in three withdrawals had started at a two-year institution. Full-time persisters were far more likely than others to have entered a university and less likely to have entered a two-year college. Moreover, three in ten full-time persisters, but only one in five erratic persisters and stopouts and 16 percent of the withdrawals entered private institutions.

The other institutional characteristics listed in the table are to some extent related to type and control. Thus, since full-time persisters were more likely than others to attend universities and private institutions, they were also more likely to attend very large schools (enrollment size above 10,000), highly selective institutions, and institutions with high tuition and fees. Conversely, withdrawals were overrepresented in the smaller, less selective, and less expensive institutions, all of these characteristics being typical of the two-year colleges, in which withdrawals were concentrated. Again, the erratic persisters and the stopouts were somewhere between these two extremes and closely resembled each other on these measures.

The picture changes somewhat when we consider the sex composition of the institution. Erratic persisters were somewhat more likely than others to enroll in women's colleges, whereas the stopouts were least likely to do so. Withdrawals were the least likely to enter men's colleges. In addition, the full-time persisters were most likely to attend a college more than 500 miles from their homes, whereas the withdrawals and the stopouts were most likely to attend a college within 50 miles of their home.

Reasons for Leaving School

Students may drop out of college, either temporarily or permanently, for a variety of reasons. Of the two criterion groups in our sample who had left school at some point, the withdrawals tended to check many more reasons for doing so than did the stopouts (Table 78). The most common reason for both groups was the need to reconsider goals and interests. The next most common reason among withdrawals was that they were tired of being students; among stopouts, it was a change in career plans. Generally, stopouts were more likely to say that they wanted to attend a different kind of institution: a different-sized school, a less expensive school, a school with a better rating, or a school closer to home. Withdrawals, on the other hand, were much more likely to give reasons indicating that their leaving school was at least in part involuntary (family responsibilities, a poor academic record) or that their commitment to higher education per se was low (a good job offer, "more education did not improve job prospects," and "did not need further degree"). In addition, about one in six withdrawals, but only 6.4 percent of the stopouts, said they had been unable to get the financial aid they needed.

Asked to indicate the single most important reason that they left school, one in five withdrawals and about one in seven stopouts said they wanted to reconsider their goals and interests, whereas 16 percent of the stopouts but only 5.3 percent of the withdrawals mentioned changes in career plans. The reasons which seem to differentiate the two groups most clearly are "good job offer" for the withdrawals and "dissatisfied with the first school" and "more education did not improve job prospects" for the stopouts.

The following is a summary of the demographic and background characteristics, college experiences and satisfactions, values and attitudes, financial situation and financial aid, and work experiences of the four groups studied: full-time persisters, erratic persisters, stopouts, and withdrawals. Also summarized are the characteristics of the institutions attended and the reasons given for leaving school by those who did so.

Summary

Demographic and Background Characteristics

- Men were more likely to persist on a full-time basis than were women.
- Whites, blacks, American Indians, and Asian-Americans were much more likely to be full-time persisters than were Chicanos or Puerto Ricans. Of those who did not persist full time, Asian-Americans were far more likely to persist erratically while Chicanos and Puerto Ricans tended to withdraw from college.
- Students who began college when they were 19 years old or younger were far more likely to be full-time persisters while those who were 30 years old or more tended to become erratic persisters.
- Protestants and Jews were overrepresented among the full-time persisters while Roman Catholics were overrepresented among the stopouts and withdrawals.
- Students who came from high-income families or whose parents were college graduates were underrepresented among the withdrawals, while the opposite is true for students who came from low-income families or whose parents did not attain a high level of education.
- Full-time persisters were far more likely to feel that their high school had prepared them well in mathematical skills, particularly when compared with the withdrawals. These two groups felt about

equally well prepared in reading and composition while those who felt very well prepared in this area were overrepresented among the stopouts and underrepresented among the erratic persisters.

- Fewer than one in six withdrawals reported college grade-point averages of less than C.
- Students who attended colleges which had no grading system were markedly overrepresented among the stopouts and withdrawals.
- Students who at the time of college entry aspired to an associate degree were highly overrepresented among the withdrawals, while those who aspired to a master's degree or more were underrepresented.

College Experiences and Satisfactions

- In both the first and second college years, full-time persisters were far more likely than the others to live in college dormitories, whereas erratic persisters, withdrawals, and especially stopouts were far more likely to live with parents or relatives.
- Full-time persisters were much more likely than others to participate in various college activities such as sports, student government, and special-interest clubs. Thus, they were more highly involved in campus life.
- Unusually large proportions of withdrawals said they felt bored much of the time and were not interested in their courses.
- Stopouts were more likely to have trouble concentrating while studying, to be uninterested in their courses, and to have failed at least one course.

Values and Attitudes

- Overall, the most valued goals were "becoming an authority in my field," "helping others who are in difficulty," "developing a meaningful philosophy of life," and "raising a family."
- Withdrawals tended to cite unrealistically high goals such as winning recognition for special contributions to their field and making a theoretical contribution to science.
- The most common reasons for going to college were "to get a job in my chosen field," "I always expected to go to college," and "to learn more about things that interest me."
- Full-time persisters were more likely, and withdrawals less likely, to cite preparation for graduate or professional school as a reason for attending college.
- Full-time persisters had the most positive self-image as reflected by their self-ratings; they were more likely than the others to rate themselves above average on nine of the seventeen personal traits.
- The most frequently cited reason for making a career choice was "interest in the field."
- Full-time persisters and erratic persisters were markedly more likely than others to indicate that a chance to use their training or schooling was an important reason for their career choice.
- Extrinsic factors such as good pay and good fringe benefits were relatively less important to the full-time persisters than to the other criterion groups.

Financial Situation and Financial Aid

- The criterion groups differed very little with respect to the proportions expressing no concern over their financial situation. However, withdrawals were more likely than others to express major concern.
- There was little difference among the criterion groups in the proportion of students who indicated that their parents were too poor to help them finance their education. However, students who felt that their parents were unwilling to help were overrepresented in all groups except the full-time persisters, suggesting that perceived psychological support from parents plays an important role in encouraging persistence.
- Fifty-eight percent of the students reported receiving some kind of financial aid.
- Withdrawals were more likely than others to receive financial aid although they got the smallest amounts.
- Over twice as many full-time persisters as withdrawals received over $4,000 in aid during their first year.
- The majority of students received all their aid in the form of grants.
- The second most common form of aid was a small grant and a loan.
- Withdrawals were more likely than other students to have an aid package consisting of a loan and work-study.
- Three in five students received some financial support from their parents, with full-time persisters most likely and withdrawals least likely to get such help.

- Full-time persisters and withdrawals were more likely to report generally favorable experiences with financial aid.
- Full-time persisters reported being more heavily in debt than did the other groups.

Work Experiences

- About 55 percent of the students reported working while in college; the range was from just over half of the full-time persisters to close to two-thirds of the stopouts.
- The great majority of students worked less than 20 hours per week.
- Full-time persisters worked the fewest hours and stopouts the most.
- Full-time persisters were the most likely to work on campus.
- Full-time persisters and erratic persisters were relatively more satisfied with their jobs than were stopouts and withdrawals.

Institutional Characteristics

- Full-time persisters were far more likely than others to have entered universities and less likely to have entered two-year colleges.
- Withdrawals were far more likely to have entered two-year colleges.
- Full-time persisters were most likely and withdrawals least likely to have entered private institutions.

Reasons for Leaving School

- The most common reason given by both the withdrawals and the stopouts for leaving school was the need to reconsider goals and interests.
- The second most common reason, among the withdrawals, was that they were tired of being students; among stopouts, it was a change in career plans.

TABLE 53

DISTRIBUTIONS BY SEX, RACE/ETHNICITY, AND AGE AMONG THE CRITERION GROUPS (In Percentages[a])

	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
Total	63.9	12.0	5.0	19.0
Sex				
Men	65.3	11.6	5.3	17.9
Women	62.4	12.6	4.8	19.9
Race/Ethnicity				
White	64.8	11.9	5.0	18.4
Black	60.2	13.2	5.7	21.0
American Indian	62.4	8.9	3.1	25.7
Asian-American	63.8	18.9	4.5	12.8
Chicano	39.2	12.0	5.9	42.9
Puerto Rican	51.6	11.6	4.5	32.3
Age				
16 or less	93.8	6.2	0	0
17	66.2	13.6	4.4	15.8
18	65.8	12.1	5.2	16.8
19	65.6	11.8	4.6	18.0
20	15.6	5.2	5.5	73.7
21	7.5	2.5	1.0	89.1
22	63.0	8.3	2.5	26.3
23-25	56.5	10.0	3.8	29.7
26-29	9 6	19.4	9.3	61.6
30 or above	23.6	56.0	0	20.4

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[a] All numbers in the remaining tables in this chapter are in percentages, unless otherwise indicated.

TABLE 54

DEMOGRAPHIC CHARACTERISTICS OF THE CRITERION GROUPS

	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
Sex					
Men	53.1	54.3	51.0	55.6	50.1
Women	46.9	45.7	49.0	44.4	49.9
Race/Ethnicity					
White	87.9	89.0	86.7	87.2	84.9
Black	8.1	7.6	8.9	9.1	8.9
American Indian	0.7	0.7	0.5	0.4	1.0
Asian-American	1.1	1.1	1.8	1.0	0.8
Chicano	1.2	0.7	1.2	1.4	2.7
Puerto Rican	1.0	0.8	1.0	0.9	1.7
Age					
16 or younger	0.2	0.3	0.1	0	0
17	3.5	3.6	3.9	3.0	2.9
18	76.6	78.9	77.1	79.1	67.8
19	15.1	15.5	14.7	13.8	14.3
20	1.9	0.5	0.8	2.1	7.5
21	0.8	0.1	0.2	0.2	3.7
22	0.4	0.4	0.3	0.2	0.5
23-25	0.7	0.7	0.6	0.6	1.2
26-29	0.6	0.1	0.9	1.0	1.8
30 or older	0.3	0.1	1.4	0	0.3

TABLE 55

RELIGION AND POLITICAL ORIENTATION, BY CRITERION GROUPS[a]

	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
Religion					
Protestant	41.4	43.2	42.2	39.1	35.3
Roman Catholic	31.7	29.7	28.8	41.2	37.6
Jewish	3.9	4.7	1.7	4.5	2.6
Other	23.0	22.4	27.3	15.2	24.4
Political Orientation					
Far left	1.4	1.3	1.5	2.0	1.6
Liberal	26.3	25.3	25.5	41.6	26.2
Middle-of-the-road	58.5	58.6	62.3	46.0	59.1
Conservative	13.2	14.4	9.4	10.3	12.4
Far right	0.5	0.4	1.3	0.2	0.6

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[a] The distribution of percentages of the "total" in these tables differs from the distribution in Chapter 3. Since these tables deal with the persistence variables, two groups--the associate degree persisters and those respondents whom we were unable to classify into one of the criterion groups--were eliminated from these analyses.

TABLE 56

PARENTAL INCOME AND EDUCATION, BY CRITERION GROUP

	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
Income					
Less than $6,000	10.7	9.6	9.6	10.5	15.5
$6,001-10,000	11.6	11.2	9.3	9.3	14.9
$10,001-15,000	26.5	24.6	31.3	30.2	28.8
$15,001-20,000	16.8	17.2	12.8	22.0	16.9
$20,001-30,000	20.0	21.4	23.1	17.9	13.6
$30,001 or more	14.4	16.0	14.0	10.2	10.4
Father's Education					
Grammar school or less	6.1	5.1	5.5	10.0	9.0
Some high school	12.7	11.0	14.4	14.5	16.6
High school graduate	29.9	29.2	24.1	36.0	34.2
Postsecondary school other than college	3.6	4.0	3.9	2.7	2.2
Some college	13.2	13.1	12.6	14.0	13.8
College degree	18.4	19.1	23.4	12.6	14.5
Some graduate school	2.7	3.4	2.7	0.8	1.0
Graduate degree	13.4	15.2	13.4	9.3	8.7
Mother's Education					
Grammar school or less	4.0	3.5	3.0	3.3	6.4
Some high school	10.8	9.3	13.5	9.6	14.6
High school graduate	41.9	40.6	43.4	51.0	43.1
Postsecondary school other than college	6.6	6.6	9.2	10.0	4.0
Some college	15.0	15.1	13.3	10.9	16.8
College degree	14.4	16.6	10.8	9.7	10.7
Some graduate school	2.3	2.8	1.6	1.9	1.1
Graduate degree	5.0	5.5	5.3	3.7	3.4

TABLE 57

ACADEMIC PREPARATION IN HIGH SCHOOL,[a] BY CRITERION GROUP

High School Preparation in:	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
Mathematical skills	31.7	35.0	30.0	35.0	20.5
Reading and composition	30.8	31.8	23.5	37.7	30.1
Foreign languages	14.9	16.3	13.9	12.5	11.7
Science	34.0	34.5	31.3	32.6	34.7
History, social sciences	39.4	39.9	35.9	42.4	39.2
Vocational skills	17.1	13.9	22.2	22.9	23.1
Musical and artistic skills	23.3	23.2	22.1	20.4	24.8
Study habits	19.2	20.6	17.1	26.3	13.9

[a] Percentage responding that high school had prepared them "very well."

TABLE 58

HIGH SCHOOL GRADES AND ACHIEVEMENT TEST SCORES, BY CRITERION GROUP

	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
High School Grades					
A	9.0	10.9	7.9	4.5	4.4
A-	13.4	15.9	10.3	12.9	6.8
B+	19.6	20.9	20.0	14.1	16.2
B	27.3	27.5	30.4	31.5	23.4
B-	15.3	13.4	16.4	11.2	22.1
C+	9.0	7.3	7.6	15.9	13.8
C	6.4	3.9	7.4	10.0	13.3
D	0.1	0.1	0	0	0.2
SAT Scores					
400-500	0.9	0.7	1.1	0.8	1.3
501-600	4.3	2.9	6.0	3.6	9.4
601-700	9.8	7.7	9.2	12.5	18.8
701-800	13.2	11.5	16.0	13.9	18.9
801-900	18.6	18.8	18.6	17.9	17.8
901-1000	18.4	19.1	19.4	24.4	13.0
1001-1100	15.8	16.9	15.4	14.0	11.7
1101-1200	9.6	11.1	7.9	7.3	5.0
1201-1300	5.8	7.0	4.4	3.3	2.3
1301-1400	2.6	3.2	1.5	1.7	1.0
1401-1500	0.9	1.0	0.5	0.5	0.7
1501-1600	0.1	0.1	0	0	0.1

TABLE 59

COLLEGE GRADE AVERAGES, BY CRITERION GROUP

Grade Average	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
A or A+	6.2	6.4	5.2	9.1	5.4
A- or B+	20.2	21.8	16.8	9.9	19.8
B	24.6	26.2	27.0	19.8	18.7
B- or C+	28.8	29.0	31.6	37.2	23.8
C	14.0	13.7	12.0	15.7	15.7
C- or D+	4.0	2.1	4.8	6.3	9.4
D	0.8	0.5	2.0	.3	1.3
Less than D	0.4	0.0	.3	.2	1.7
Pass/satisfactory	0.4	0.1	.2	.4	1.2
Fail/unsatisfactory	0.1	0.0	.1	.0	0.7
Not applicable/no grading system in my institution	0.5	0.1	.1	1.1	2.2

TABLE 60

DEGREE PLANS AND INTENDED MAJORS IN 1975, BY CRITERION GROUP

	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Degree Plans					
None	2.3	2.7	0.8	1.3	2.4
Associate (A.A. or equivalent)	9.3	5.1	12.3	13.7	20.4
Bachelor's degree (B.A., B.S., etc.)	38.9	39.3	39.2	37.2	37.8
Master's degree (M.A., M.S., etc.)	26.4	28.4	26.9	27.4	18.8
Ph.D. or Ed.D.	8.0	9.0	6.0	5.9	6.8
M.D., D.O., D.D.S., or D.V.M.	5.9	7.1	6.0	2.6	2.6
LL.B. or J.D. (Law)	4.6	5.5	4.2	3.4	2.2
B.D. or M.Div. (Divinity)	0.7	0.5	0.2	4.9	0.4
Other	3.8	2.3	4.3	3.7	8.7
Intended Major					
Agriculture	3.0	2.6	3.0	2.0	4.4
Biological science	6.7	7.8	3.9	2.8	5.7
Business	19.9	20.0	23.0	10.2	20.4
Education	9.6	11.3	6.3	8.4	5.8
Engineering	8.5	8.0	8.9	16.8	7.7
English	1.1	1.1	0.5	0.6	1.6
Fine arts	5.8	5.1	7.0	10.4	6.4
Health professions	7.3	6.7	13.8	7.3	5.5
History and political science	3.5	4.1	2.8	1.7	2.3
Humanities	2.0	2.2	0.9	5.0	1.1
Mathematics and statistics	1.1	1.4	0.8	0.3	0.3
Physical sciences	2.4	2.7	2.3	3.2	1.4
Social sciences	6.9	6.8	5.3	5.7	8.8
Other fields (technical)	8.4	6.3	8.7	11.4	14.6
Other fields (nontechnical)	9.6	9.8	8.4	5.9	10.5
Undecided	4.3	4.1	4.5	8.4	3.5

TABLE 61

CAREER PLANS IN 1975 AND IN 1977, BY CRITERION GROUP

	Total		Full-time Persisters		Erratic Persisters		Stopouts		Withdrawals	
	1975	1977	1975	1977	1975	1977	1975	1977	1975	1977
Artist/performer	5.5	5.5	4.8	5.1	6.5	9.0	6.6	4.4	7.1	4.9
Business	15.4	20.9	15.7	22.2	17.6	18.3	8.9	20.5	14.8	18.3
Clergy or religious worker	0.8	1.1	1.0	1.3	0.4	0.5	2.9	1.8	0.2	0.5
Doctor (M.D., D.D.S., etc.)	4.7	2.7	5.7	3.3	4.1	3.0	3.1	1.7	2.2	0.4
Educator, college or university	0.6	1.5	0.8	2.0	0.2	1.0	0.3	0.5	0.2	0.5
Educator, secondary or elementary	6.7	10.0	7.4	12.9	4.2	6.2	7.6	6.9	5.5	3.6
Engineer	6.1	6.1	6.6	6.1	6.2	5.6	7.6	7.2	4.2	5.8
Farmer, forester	3.6	1.9	3.9	2.0	3.2	0.6	2.2	1.5	3.5	2.7
Health professional	8.5	5.8	9.3	5.6	7.0	7.9	6.0	9.8	7.8	4.0
Lawyer	4.1	2.8	4.9	3.6	3.7	2.1	2.7	1.4	2.4	1.0
Nurse	5.4	4.2	4.2	4.1	13.2	7.7	4.6	3.3	4.5	2.5
Research scientist	2.1	2.6	2.5	3.3	0.9	1.2	1.3	1.7	1.4	1.6
Other	24.2	23.2	20.9	19.2	20.6	21.6	34.3	24.6	35.2	37.2
Undecided	12.1	11.7	12.3	9.3	12.3	15.4	11.8	14.7	11.1	17.0

TABLE 62

COLLEGE RESIDENCE, BY CRITERION GROUP

Residence	Total		Full-time Persisters		Erratic Persisters		Stopouts		Withdrawals	
	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977	1975-1976	1976-1977
With parents or relatives (not including spouse)	37.1	38.1	31.8	30.0	43.5	47.9	55.1	69.8	46.2	51.1
With spouse	0.9	3.0	0.3	1.1	0.9	3.9	2.5	2.7	2.4	8.8
Private home, apartment, or room	8.3	16.3	6.9	16.0	9.3	17.6	6.2	15.4	13.1	16.7
College dormitory	50.3	35.4	58.3	45.6	40.7	20.4	28.2	8.8	35.1	17.1
Fraternity or sorority house	0.7	2.3	0.8	2.9	0.9	1.9	0.1	0.6	0.3	0.8
Other campus student housing	2.0	3.5	1.7	3.9	4.6	5.7	1.5	1.1	1.5	1.3
Other	0.8	1.5	0.3	0.5	0	2.6	6.4	1.6	1.4	4.0

TABLE 63

COLLEGE EXPERIENCES, BY CRITERION GROUP

Experience	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Had trouble concentrating while studying	43.5	41.8	46.8	56.4	45.5
Felt bored much of the time	19.1	14.7	18.1	26.1	32.7
Felt lonely much of the time	17.5	15.9	19.3	20.8	20.7
Wasn't very interested in any of my courses	10.8	6.9	11.8	26.3	19.2
Couldn't adjust the program of study to fit my own academic and professional interests	11.3	7.9	11.2	18.7	21.0
Changed major field	28.7	30.0	35.9	42.1	16.3
Received a lot of encouragement from my family to stay in school	45.9	45.4	50.6	43.8	45.4
Received a lot of encouragement from my friends to stay in school	26.3	27.2	29.5	21.1	22.7
Changed career choice	24.7	23.6	35.5	44.2	16.6
Failed one or more courses	20.3	18.3	22.5	29.1	23.1
Considered dropping out but didn't	19.1	20.2	25.2	18.2	11.8
Participated in a play or entered an art competition	8.0	8.4	10.0	5.0	6.1
Participated in intercollegiate or intramural sports	42.0	48.6	36.8	35.9	24.8
Worked on the school paper, yearbook, or literary magazine	8.1	8.2	10.7	2.9	7.8
Was elected to a scholastic honor society	10.3	11.6	10.4	3.3	7.8
Participated in student government	9.5	11.2	10.3	4.8	4.6
Joined a social fraternity, sorority, or club	25.1	27.5	25.1	18.2	18.6
Participated in subject-matter or special-interest clubs	22.3	25.8	22.9	9.9	13.5
Participated in student religious organization	11.3	12.9	12.7	9.1	5.8
Was a guest in a teacher's or administrator's home	23.2	27.0	22.3	11.3	13.8
Called a teacher or an administrator by his or her first name	46.5	50.3	45.9	42.0	35.4
Studied with other students	76.0	81.4	76.5	55.9	62.9
Tutored another student	25.6	29.0	25.1	22.3	15.6
Voted in a student election	57.7	63.8	53.5	41.5	44.0
Sang in a choir or glee club or played in a school band/orchestra	9.3	11.3	7.3	4.6	4.8

(Table 63 continued)

Experience	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Participated in organized student demonstrations	7.0	8.2	5.7	5.1	4.3
During the last year I had at least two courses in my chosen field of study	74.1	83.4	70.0	57.4	49.9
It is very important to me to complete my original degree plans	52.5	59.8	50.3	44.7	31.1
I was in Upward Bound, Educational Opportunity Program, or Talent Search	2.4	1.7	1.5	3.1	5.1
Received pressure from parents or friends to stay in school	14.1	11.7	14.4	21.6	20.1

TABLE 64

SATISFACTION WITH COLLEGE SERVICES, BY CRITERION GROUP[a]

	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
Orientation for new students	74.5	76.1	73.1	67.3	71.6
Registration	63.2	63.5	57.9	54.3	67.9
Distribution of grade reports	85.9	86.5	84.3	80.3	86.4
Distribution of transcripts	79.3	80.7	74.5	79.4	77.8
Financial aid	48.9	48.1	46.3	32.3	57.0
Academic advisement	55.9	57.8	55.3	47.3	51.7
Career counseling	51.0	55.2	44.1	49.5	42.9
Personal counseling	59.6	62.6	55.1	52.5	55.4
Tutoring or remedial program	72.2	74.5	61.6	78.4	71.3
Child care facilities	67.7	73.9	52.0	68.7	60.1
Health services	70.6	69.7	64.8	80.5	76.4
Job placement	58.3	65.5	51.4	40.1	44.0
Campus security	69.3	68.9	60.8	70.5	76.7
On-campus housing	67.2	67.5	69.8	60.0	65.6
Parking service	37.5	31.9	41.4	34.4	55.0
Financial aid advice	53.3	50.6	51.8	38.8	65.7
Extracurricular activities	84.5	85.9	85.8	75.7	80.4
Social life (dating, parties, etc.)	78.8	79.9	80.7	70.7	75.5
Course work	85.0	88.8	85.8	75.6	73.2
Reading and study skills lab	78.5	82.5	69.2	73.0	74.9
Special instructional media	76.9	82.3	74.6	56.9	68.3
Independent study	80.9	86.4	78.8	64.1	71.9
Honors program	78.7	81.4	80.9	69.8	71.2
Cooperative work program	73.4	76.9	69.8	58.1	70.3
Assistance in finding housing	55.1	54.0	63.4	42.8	56.0
Assistance in finding part-time work	50.8	52.5	44.3	56.8	46.8
Ethnic studies	67.4	68.8	63.3	78.1	63.5
Women's studies	66.6	67.2	62.4	75.0	64.8

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[a] Percentage responding that they were "satisfied" with the service. Ns for each item based on those students who found the particular item applicable to themselves and indicated either satisfaction or dissatisfaction with it. The majority of students indicated "not applicable" for child care and the last eight items, so the percentages for these items are based on small Ns.

TABLE 65

LIFE GOALS IN 1975, BY CRITERION GROUP[a]

Life Goal	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	10.3	11.1	9.3	7.9	9.1
Becoming an authority in my field	72.3	73.2	70.7	67.1	71.7
Obtaining recognition from my colleagues for contributions to my special field	44.1	44.1	41.0	36.0	47.8
Influencing the political structure	12.6	13.2	12.5	9.5	11.7
Influencing social values	28.3	29.2	26.2	19.3	29.2
Raising a family	57.8	59.7	58.9	54.3	51.8
Having administrative responsibility for the work of others	29.9	32.0	22.6	24.2	29.1
Being very well off financially	46.3	47.5	38.1	49.9	46.6
Helping others who are in difficulty	68.2	67.1	69.5	72.6	70.2
Making a theoretical contribution to science	13.5	13.2	8.8	13.3	17.3
Writing original works (poems, novels, short stories, etc.)	11.9	11.6	13.5	10.1	12.7
Creating artistic work (painting, sculpture, decorating, etc.)	13.0	11.6	15.5	12.5	16.3
Being successful in a business of my own	40.6	39.8	41.7	31.7	45.2
Becoming involved in programs to clean up the environment	25.2	25.6	23.3	23.8	25.3
Developing a meaningful philosophy of life	65.9	68.2	60.0	61.5	63.2
Participating in a community action program	28.7	30.3	26.0	18.4	27.7
Keeping up to date with political affairs	39.1	41.6	31.8	30.2	37.9

[a] Percentage indicating that goal was "very important" or "essential" to them.

TABLE 66

REASONS GIVEN IN 1977 FOR ATTENDING COLLEGE, BY CRITERION GROUP

Reason	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
I always expected to to to college	71.6	73.9	72.0	65.1	65.4
My parents or family wanted me to go to college	59.3	60.6	61.6	54.1	54.7
To contribute more to my community	20.6	21.9	16.7	22.2	18.0
To get a job	62.3	63.2	66.8	56.0	58.0
To make more money	60.5	59.7	64.1	73.1	57.6
To get a job in my chosen field	73.5	74.6	74.5	73.2	69.5
To obtain financial aid	2.8	3.0	1.9	2.9	3.0
To gain a general education and appreciation of ideas	54.7	55.5	45.3	58.8	56.8
To learn more about things that interest me	68.0	68.0	68.1	64.6	68.8
To prepare myself for graduate or professional school	29.8	33.8	29.6	27.1	17.5
To meet new and interesting people	52.5	54.6	45.5	48.2	51.3
All my friends went to college	10.0	10.6	10.8	6.8	8.2
There was nothing better to do	8.2	7.0	10.4	5.8	11.4
Could not find a job	2.3	1.5	3.0	4.4	4.0
I participated in special programs (Upward Bound, Talent Search, Educational Opportunity Program)	2.3	1.9	1.9	3.3	3.5
My teachers and counselors encouraged me to go	32.9	33.3	31.3	27.9	33.8

TABLE 67

SELF-RATINGS IN 1977, BY CRITERION GROUP[a]

Trait	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
Academic ability	43.3	46.5	44.8	35.3	33.9
Motivation to achieve	48.2	52.2	41.8	38.2	41.4
Leadership ability	35.4	37.7	28.7	30.1	32.8
Mathematical ability	30.0	32.6	27.0	30.5	23.1
Mechanical ability	26.6	23.9	28.3	26.9	34.7
Originality	32.5	34.0	29.6	31.5	29.4
Popularity	24.0	25.4	21.5	25.3	20.6
Popularity with the opposite sex	23.6	24.1	24.2	23.4	21.3
Self-confidence (social)	27.5	29.2	28.1	19.3	23.5
Self-confidence (intellectual)	32.2	34.2	27.1	23.0	31.0
Understanding of others	58.3	58.6	60.8	55.3	56.5
Writing ability	29.6	29.3	27.0	27.5	32.8
Artistic ability	18.9	17.7	18.4	18.2	23.5
Public speaking ability	18.9	20.6	17.0	16.6	15.3
Athletic ability	29.6	31.1	26.9	27.2	26.8
Physical attractiveness	23.4	24.4	27.7	22.7	17.4
Determination	59.8	62.8	61.1	48.5	52.0

[a] Percentage indicating they were "above average" on trait, compared with the average person of their own age.

TABLE 68

REASONS GIVEN IN 1977 FOR CAREER CHOICE, BY CRITERION GROUP[a]

Reason	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Job openings are generally available	58.0	56.5	61.5	51.1	62.4
Rapid career advancement is possible	42.6	39.1	44.1	42.2	53.8
Good pay	58.7	54.5	60.1	68.0	70.0
It's a well-respected or prestigious occupation	35.7	36.1	37.5	31.0	34.4
It provides a great deal of autonomy	24.8	25.9	24.1	20.5	22.8
Chance for steady progress	50.7	48.6	57.3	46.8	54.6
Chance for originality	46.2	46.5	42.6	45.4	48.0
Can make an important contribution to society	46.1	49.2	37.5	38.8	43.1
Can avoid pressure	17.0	15.3	17.4	19.9	21.9
Can work with ideas	51.9	52.9	52.1	45.4	49.8
Can be helpful to others	62.4	64.3	62.0	51.5	59.3
Have leadership opportunities	39.9	41.4	35.8	38.4	37.7
Able to work with people I like	58.3	58.6	61.1	53.0	56.7
Interest in the field	90.5	92.4	92.2	84.7	84.4
Enjoyed my past experience in this occupation	50.7	50.6	55.0	51.7	48.0
No more out-of-school training required	7.1	6.7	4.8	5.9	10.0
Good fringe benefits	33.9	30.2	37.2	38.4	43.3
Chance to use my training or schooling	67.1	70.9	72.3	57.1	53.2
Able to work in good physical environment	55.6	56.2	56.3	49.7	54.9
Chance to learn new skills	55.3	54.5	56.8	46.0	59.7
Job security	57.7	57.5	60.6	62.9	55.4
It isn't too difficult to prepare for	6.9	6.0	6.8	3.7	10.7
The preparation does not involve too many years of education beyond high school	8.1	6.0	7.8	5.6	16.3
I can get into a program that does not cost too much	9.0	6.6	9.6	11.1	16.1

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[a] Percentage indicating the reason was "very important."

TABLE 69

CONCERN ABOUT FINANCING COLLEGE, BY CRITERION GROUP

Degree of Concern	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
None	37.1	36.1	39.5	36.9	39.4
Some	48.3	51.1	47.1	47.2	39.9
Major	14.6	12.8	13.5	16.3	20.7

TABLE 70

DESCRIPTORS OF FINANCIAL SITUATION, BY CRITERION GROUP

	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Major expenses or debts	39.4	40.1	35.6	46.4	37.5
Contribute to the support of parents	9.6	7.7	11.0	13.9	13.9
Parents have a low income and cannot help with college expenses	23.2	22.5	23.3	22.5	25.9
Parents not willing to help pay college expenses	9.0	6.7	15.9	13.6	11.4
Head of household/single parent	5.0	3.7	5.8	6.0	8.8

TABLE 71

AMOUNT OF STUDENT FINANCIAL AID IN 1975-76, BY CRITERION GROUP[a]

Amount of Aid	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Have financial aid	58.3%	58.8%	54.9%	47.2%	62.9%
Average amount of aid received	$1590	$1721	$1357	$1348	$1336
All Aid					
$1-300	17.8%	16.6%	26.4$	21.0%	16.1%
$301-600	6.2	4.8	8.6	12.1	8.5
$601-1000	16.1	13.2	13.2	16.0	26.8
$1001-2000	31.7	33.2	27.5	27.7	30.2
$2001-3000	16.4	17.6	16.2	13.1	13.1
$3000-4000	7.0	8.7	4.4	5.1	3.0
$4001 and above	4.8	5.8	3.7	5.1	2.5
Grants					
$1-300	23.5	21.7	35.7	29.2	21.3
$301-600	6.8	5.0	8.6	13.2	10.4
$601-1000	22.9	19.9	18.5	19.2	36.5
$1001-2000	28.5	31.2	24.3	26.6	22.0
$2001-3000	11.4	13.3	9.4	9.1	7.1
$3001 and above	6.9	9.0	3.4	2.6	2.6
Loans					
$1-300	25.1	25.5	22.7	29.3	22.6
$301-600	0.5	0.5	0	0	0.5
$601-1000	29.2	27.7	28.4	24.2	36.0
$1001-2000	35.1	35.4	44.0	35.3	30.6
$2001-3000	9.5	10.1	4.9	10.7	9.8
$3001 and above	0.7	0.9	0	0.4	0.5
Work-study					
$1-600	54.3	52.0	42.5	69.6	68.8
$601-1000	38.7	40.9	51.8	26.5	23.2
$1001 and above	6.9	7.1	5.7	3.9	7.9

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[a] Percentages based on students having each type of aid.

(Table 71 continued)

AMOUNT OF STUDENT FINANCIAL AID IN 1976-77, BY CRITERION GROUP[a]

Amount of Aid	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Have financial aid	56.5%	56.4%	49.5%	47.2%	66.8%
Average amount of aid received	$1640	$1778	$1426	$1077	$1286
All Aid					
$1-300	17.1%	14.1%	24.7%	38.8%	18.9%
$301-600	5.9	4.2	2.4	4.1	12.7
$601-1000	15.9	15.2	22.3	17.5	15.9
$1001-2000	33.6	33.9	31.3	21.4	34.8
$2001-3000	15.2	18.0	13.1	14.6	9.0
$3001-4000	6.4	7.3	2.8	1.9	5.9
$4001 and above	5.8	7.3	3.4	1.7	2.8
Grants					
$1-300	23.3	20.1	35.8	42.3	25.4
$301-600	7.0	5.0	2.8	5.0	13.9
$601-1000	20.8	21.8	18.0	19.6	20.5
$1001-2000	30.0	30.2	28.4	25.0	28.7
$2001-3000	12.2	14.1	11.2	6.6	8.5
$3001 and above	6.6	8.7	3.7	1.7	3.0
Loans					
$1-300	21.6	18.6	21.1	21.7	29.9
$301-600	1.2	0.3	11.6	0	0.1
$601-1000	28.6	28.7	33.0	38.6	24.5
$1001-2000	36.1	38.0	26.5	29.6	36.7
$2001-3000	11.5	13.3	6.0	9.4	8.3
$3001 and above	0.9	0.1	1.8	0.7	0.6
Work-study					
$1-600	50.8	50.7	35.4	63.8	56.5
$601-1000	39.4	41.4	41.8	35.4	31.8
$1001 and above	9.8	7.9	22.8	0.8	11.7

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[a] Percentages based on students having each type of aid.

TABLE 72

FORMS OF FINANCIAL AID, BY CRITERION GROUP

	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Financial Aid					
Have financial aid 1975-1976	58.3	58.8	54.9	47.2	62.9
Have financial aid 1976-1977	56.5	56.4	49.5	47.2	66.8
Form of Financial Aid[a]					
1975-76					
Grant only	53.5	52.1	54.1	57.4	57.2
Loan only	7.5	7.8	5.6	8.5	7.3
Work-study only	2.5	2.4	2.6	0.7	3.0
Large grant and loan and work-study	1.8	2.2	1.2	1.4	0.9
Small grant and loan and work-study	6.6	6.6	7.4	3.8	6.4
Large grant and loan	4.6	5.3	4.2	4.9	2.5
Small grant and loan	14.0	14.2	13.0	17.4	13.1
Large grant and work-study	3.3	3.4	4.8	4.5	1.9
Small grant and work-study	5.4	5.2	6.9	0.7	6.2
Loan and work-study	0.9	0.8	0.2	0.7	1.5
1976-77					
Grant only	51.3	49.1	50.6	69.9	57.0
Loan only	7.9	7.4	10.4	8.5	8.1
Work-study only	3.9	3.6	6.5	0.2	4.1
Large grant and loan and work-study	1.6	1.9	1.0	1.3	1.0
Small grant and loan and work-study	7.0	7.5	3.5	2.4	8.1
Large grant and loan	4.1	4.7	3.0	1.5	2.8
Small grant and loan	12.4	13.4	11.4	13.8	7.9
Large grant and work-study	3.7	4.6	2.3	0.7	1.1
Small grant and work-study	6.8	6.5	10.8	1.5	6.8
Loan and work-study	1.4	1.3	0.4	0.3	3.1

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[a] Percentages based on students with financial aid.

TABLE 73

TYPE OF FINANCIAL AID, BY CRITERION GROUP[a]

	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
1975-1976					
Parental contribution	60.5	64.2	55.0	57.3	51.9
Tuition waiver	13.0	11.7	19.9	20.9	11.4
BEOG	41.5	38.5	38.4	35.0	54.7
SEOG	8.0	9.2	6.4	3.2	6.0
State scholarship or grant	29.1	30.8	25.1	21.3	27.3
Local or private scholarship	26.0	29.0	21.1	28.6	18.3
Vocational grant	2.0	1.7	4.6	0.8	1.5
Other grant	9.1	9.0	13.0	9.3	7.2
FISL or GSLP	9.1	8.9	7.4	12.7	10.1
NDSL	21.0	23.0	19.2	19.0	16.0
Other loan	7.5	7.5	6.8	9.7	7.3
College Work-Study	20.4	20.6	23.0	11.8	19.9
GI benefits	4.5	5.0	3.9	2.4	3.8
Social Security Dependents benefits	14.4	17.3	8.2	12.4	8.6
1976-1977					
Parental contribution	60.8	63.2	59.4	54.3	52.4
Tuition waiver	12.4	11.4	22.8	9.3	10.6
BEOG	39.5	38.9	32.8	35.9	47.9
SEOG	8.2	9.4	4.9	3.3	6.3
State scholarship or grant	28.9	30.2	16.7	33.9	30.0
Local or private scholarship	18.8	21.2	10.7	16.7	13.4
Vocational grant	1.5	1.5	2.2	1.1	1.1
Other grant	8.9	8.9	10.4	9.2	7.8
FISL or GSLP	9.8	9.8	6.7	9.5	12.1
NDSL	18.6	20.6	14.1	13.8	13.7
Other loan	8.3	8.0	13.4	5.6	6.7
College Work-Study	24.4	25.4	24.6	6.3	24.2
GI benefits	5.0	5.4	3.9	3.5	4.4
Social Security Dependents benefits	16.4	19.3	8.6	12.7	8.8

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[a] Percentages based on students with financial aid.

TABLE 74

EXPERIENCES WITH FINANCIAL AID, BY CRITERION GROUP[a]

	Total	Full-time Persisters	Erratic Persisters	Stopouts	Withdrawals
Lost aid because dropped out	5.9	0.3	10.1	7.8	21.9
Parents not complete financial statement	6.9	7.2	6.0	10.6	5.6
Didn't think eligible for financial aid	16.0	17.7	14.4	22.0	9.7
Grades too low	2.2	1.7	2.3	4.6	3.3
Income status too high	23.4	25.0	20.8	28.8	18.0
Aid enabled me to attend school	45.7	45.7	38.1	46.1	50.1
Could not get aid because enrolled part-time	1.3	0.4	6.4	0.6	1.4
Financially independent of parents	12.8	11.7	15.1	16.8	14.0
Not apply in time	4.3	4.6	4.7	5.9	2.5
Not apply for financial aid	9.2	9.4	11.6	14.7	5.7
Financial aid forms too long	2.4	2.4	2.8	2.7	2.0
Experiences generally favorable	40.2	42.2	34.2	26.9	40.6
Didn't know about financial aid options	5.6	5.5	4.7	5.8	6.4
Turned down for financial aid	20.3	21.3	22.9	18.6	15.7
Couldn't get type of aid I wanted	9.4	10.6	6.4	9.8	7.2
Didn't want to get further into debt	7.0	5.5	6.0	10.3	11.9
Different aid would have been better for me	4.8	5.2	3.5	3.2	4.6
Parents didn't want to pay more	5.8	5.6	5.8	7.4	6.0
Experience has been generally unfavorable	18.7	19.7	18.0	33.5	11.8

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[a] Percentages based on students with financial aid.

TABLE 75

LOAN INDEBTEDNESS, BY CRITERION GROUP

	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With drawals
Amount of Loan Indebtedness Already Incurred					
None	63.6	63.5	67.0	65.3	61.2
Less than $500	5.1	4.1	4.7	13.4	6.8
$500-1000	6.1	5.5	7.9	4.1	7.8
$1001-2000	10.3	10.3	9.0	8.4	11.5
$2001-4000	10.2	10.6	9.0	7.7	10.6
$4001-6000	3.7	4.9	1.6	0.8	2.0
$6001-8000	0.7	0.9	0.5	0.2	0.1
$8001-10,000	0.1	0.1	0.2	0.1	0
$10,001 or more	0.1	0.2	0	0	0.1
Maximum Amount of Loan Indebtedness Willing to Incur					
None	38.1	39.7	32.1	38.4	36.3
Less than $500	4.8	4.9	6.7	4.5	3.5
$500-1000	7.3	5.6	11.2	12.2	9.6
$1001-2000	9.9	9.8	8.5	15.0	9.6
$2001-4000	15.4	15.4	15.5	14.9	15.4
$4001-6000	10.7	11.2	12.5	8.6	8.3
$6001-8000	4.8	5.9	3.1	3.0	2.6
$8001-10,000	3.4	3.3	1.9	1.0	5.7
$10,001 or more	5.5	4.3	8.4	2.4	9.1

TABLE 76

WORK EXPERIENCES, BY CRITERION GROUP

	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Worked	54.7	52.7	57.5	66.0	56.6
Number of Hours Worked[a]					
1-5 hours	10.2	12.0	4.6	7.2	9.5
6-10 hours	19.0	22.0	17.0	7.4	14.6
11-15 hours	19.0	20.9	21.3	9.9	14.4
16-20 hours	22.8	21.4	25.7	30.6	23.0
21-30 hours	19.1	18.3	15.1	16.5	24.8
31-40 hours	8.5	4.9	13.4	23.5	11.9
41 hours or more	1.4	0.6	3.0	4.9	1.8
Amount Earned Per Week					
$1-49	56.9	64.1	46.5	32.1	48.4
$50-74	23.9	21.2	26.5	35.7	27.0
$75-99	12.4	10.0	14.4	9.7	19.6
$100-149	5.1	4.0	7.1	17.6	3.5
$150 or more	1.7	0.7	5.5	4.8	1.5
Work Location					
1975-76: On campus	32.1	37.6	25.6	10.6	24.7
Off campus	67.9	62.4	74.4	89.4	75.3
1976-77: On campus	32.4	39.4	21.7	6.3	21.6
Off campus	67.6	60.6	78.3	93.7	78.4
Type of Work					
Athletic assistant	4.1	5.0	3.4	2.4	2.5
Banking (teller, etc.)	1.8	1.4	1.9	0.9	3.0
Cashier/checker	19.1	17.7	22.0	24.5	20.1
Child care	4.5	4.9	3.1	3.8	4.3
Clerical/secretarial	17.3	18.2	20.0	12.4	14.2
Driver (delivery, chauffeur)	5.8	5.6	3.2	21.6	3.1
Food service worker (food preparation, waiting tables, busing, washing dishes)	25.5	26.6	20.5	15.6	28.3
Government or judiciary aide	1.2	1.4	1.3	0.6	1.0
Grounds or building maintenance (including security)	7.4	7.8	7.5	14.1	3.9
Housework	2.9	3.2	2.2	1.4	3.3
Lab work or technician	5.6	5.0	8.8	7.1	4.9
Library aide	5.3	6.5	3.3	2.3	3.6

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[a] Percentages based on students who worked while in school.

(Table 76 continued)

	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
(Type of Work - continued)					
Mechanic	3.2	2.6	3.6	12.2	2.2
Musician	2.0	2.3	1.3	1.8	1.5
Research assistant	1.7	2.2	1.5	0.3	0.7
Sales	13.1	13.0	12.4	17.8	12.4
Social or community aide (include hospital work)	5.5	6.1	2.4	6.8	5.2
Switchboard operator	1.8	1.8	1.4	3.1	1.4
Teaching or tutoring	5.9	7.6	3.2	5.9	2.6
Other semiskilled and unskilled (factory worker, laborer, usher, painter)	23.7	23.7	29.8	27.3	18.7
Relatedness of Work to Field of Study					
Closely related	14.1	14.7	16.3	10.7	11.7
Somewhat related	21.7	20.5	26.8	29.6	19.8
Not related	64.2	64.7	56.8	59.7	68.4
Job Satisfaction					
Very satisfied	30.1	32.9	35.9	14.7	22.3
Somewhat satisfied	39.0	39.4	38.8	39.2	37.6
No opinion	13.9	12.2	11.7	28.3	16.0
Somewhat dissatisfied	10.5	11.5	8.6	10.7	8.7
Very dissatisfied	6.5	4.1	5.0	7.1	15.4

TABLE 77

INSTITUTIONAL CHARACTERISTICS, BY CRITERION GROUP

	Total	Full-time Persisters	Erratic Persisters	Stop outs	With- drawals
Type					
University	20.4	25.7	15.6	12.5	7.4
Four-year college	46.9	48.4	40.3	42.8	26.6
Two-year college	32.7	25.8	44.1	44.7	65.9
Control					
Public	74.8	70.7	79.2	80.8	84.5
Private	25.2	29.3	20.8	19.2	15.5
Size					
Less than 250	0.3	0.3	0.1	0.8	0.4
250-500	3.8	3.0	2.7	0.9	7.8
501-1000	10.1	10.7	11.2	8.3	7.6
1001-1500	4.9	4.0	3.1	3.5	9.7
1501-2000	12.6	11.1	11.2	12.7	18.7
2001-5000	27.0	25.5	32.4	21.2	30.2
5001-10,000	20.2	20.8	19.0	35.5	15.2
10,001-20,000	18.9	22.0	18.5	14.5	9.7
20,001 and above	2.2	2.7	1.8	2.7	0.8
Selectivity (SAT Verbal and Math)					
Less than 775	3.8	3.1	4.2	4.1	5.6
775-850	25.6	18.3	31.9	37.9	43.0
851-925	21.9	20.9	23.5	16.4	25.8
926-1000	20.3	23.3	15.9	16.2	14.2
1001-1075	11.5	13.7	9.4	12.3	5.0
1076-1150	9.4	11.3	9.1	7.3	3.9
1151-1225	3.9	5.1	2.8	2.8	0.8
1226-1300	2.5	3.2	1.8	2.4	0.8
1301 and above	1.0	1.1	1.3	0.5	0.8
Tuition and Fees					
$1-250	8.5	5.7	7.0	9.2	19.1
$251-500	12.3	10.6	14.6	14.2	16.3
$501-750	38.1	37.3	45.3	42.2	35.2
$751-1000	13.3	14.7	10.3	10.7	10.9
$1001-1500	6.8	7.2	4.3	3.1	8.0
$1501-2000	3.4	3.9	1.9	4.8	2.2
$2001-3000	11.8	13.7	11.0	10.0	5.8
$3001 and above	5.8	6.8	5.6	5.9	2.4

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(Table 77 continued)

	Total	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals
Percentage of Women in Student Body					
0	0.8	0.9	1.1	1.0	0.3
1-9%	3.5	3.8	4.7	4.7	1.5
10-24%	4.7	5.6	1.8	3.3	4.2
25-44%	45.6	42.3	46.9	38.6	57.5
45-54%	38.4	39.5	37.8	48.0	32.6
55-74%	3.1	3.7	2.8	1.9	1.6
75-90%	0.8	1.1	0.3	0.4	0.4
91-99%	2.1	2.3	3.2	1.8	0.9
100%	1.0	1.0	1.4	0.3	0.9
Distance from Home					
10 miles or less	21.9	20.4	22.7	31.4	25.0
11-20 miles	8.9	8.1	10.5	7.6	11.5
21-50 miles	15.7	15.1	14.1	13.1	20.8
51-100 miles	15.8	16.4	13.5	16.6	14.7
101-200 miles	17.7	17.9	20.8	15.6	15.4
201-500 miles	13.4	14.8	12.1	11.6	8.5
501-750 miles	2.9	3.2	2.0	2.4	2.1
751 miles and above	3.7	4.1	4.2	1.7	2.1

TABLE 78

REASONS GIVEN BY STOPOUTS AND WITHDRAWALS FOR LEAVING COLLEGE[a]

Reason	Stopouts	Withdrawals
Completed program	5.8	18.5
Family responsibilities	5.6	12.6
Good job offer	5.7	17.1
Better social life	13.5	16.0
Go to different sized school	11.2	7.0
Be farther from home	9.1	11.5
Be closer to home	10.2	8.5
Move to different location	6.9	12.0
Go to school with better rating	16.0	12.1
Didn't do as well academically	11.7	23.3
Relatives discouraged me	2.1	3.8
Did not need further degree	1.3	12.1
Reconsidered goals	26.5	34.5
Changed career plans	22.2	24.5
Tired of being student	5.5	30.0
Dissatisfied with first school	18.4	21.8
Wanted less expensive school	9.6	6.6
Financial situation improved	1.2	2.7
Unable to get aid I needed	6.4	16.3
Wanted practical experience	15.6	24.2
More education did not improve job prospects	2.9	9.5
Didn't feel safe on campus	3.0	3.9
Had no place to study	1.8	3.3
My boy/girlfriend moved	2.4	3.4
Didn't fit in at this school	11.9	10.2

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[a] Students were asked to mark all that apply.

TABLE 79

SINGLE MOST IMPORTANT REASON GIVEN BY STOPOUTS AND WITHDRAWALS FOR LEAVING COLLEGE

	Stopouts	Withdrawals
Completed program	7.4	11.6
Family responsibilities	5.4	7.8
Good job offer	1.3	7.1
Better social life	0.7	0.1
Go to different sized school	0.7	0.1
Be farther from home	0.2	0.3
Be closer to home	2.6	0.6
Move to different location	5.5	1.8
Go to school with better rating	3.8	5.7
Didn't do as well academically	5.7	9.0
Relatives discouraged me	0.3	0.1
Did not need further degree	0	1.4
Reconsidered goals	14.7	20.6
Changed career plans	15.6	5.3
Tired of being student	0.3	6.9
Dissatisfied with first school	15.1	3.7
Wanted less expensive school	4.0	0.7
Financial situation improved	0.1	0.5
Unable to get aid I needed	6.1	6.3
Wanted practical experience	2.9	3.0
More education did not improve job prospects	9.6	0.3
Didn't feel safe on campus	0	1.0
Had no place to study	0	0
My boy/girlfriend moved	0.4	3.1
Didn't fit in at this school	6.7	3.0

CHAPTER 5

STUDENTS AND FINANCIAL AID: A PROFILE

Evidence presented elsewhere shows that financial aid is one of several variables that affect student persistence. The importance of some types, as well as the amount, of aid has also been illustrated. This chapter describes the college financial aid environments experienced by the students in this study. With the knowledge that financial aid is an important variable affecting student persistence, we hope that future aid policy will be developed to alter the existing aid environment to enhance student persistence.

This chapter has four sections. Since the students in our study entered college in fall 1975, a knowledge of trends in student aid during 1974 and 1975 may be useful in assessing the aid environments these students encountered. Therefore, the first section discusses the types of financial assistance available to students who entered college in 1974 and 1975. The next section focuses on the students themselves. Demographic data are used to compare those students who received aid with those who did not. The actual college aid experiences of these two groups are also described. The third section describes the financial aid situation of those students in our study who returned for their second year in college (1976-77). The particular focus is on the actual awards and types of aid these returning students received. Finally, policy implications of our findings in this chapter are outlined.

1974-75 Financial Aid Trends

The financial aid data for 1974 and 1975 are taken from The American Freshman (A. Astin et al.) for each of those years. These data describe the national financial aid situation for first-time, full-time freshmen.

It is apparent that little change occurred in the percentage of students receiving any of the listed types of aid between 1974 and 1975 (Table 80). However, a few changes should be pointed out. Although there is virtually no difference between the proportion of students who received parental assistance in 1974 and 1975, the fact that such a large number are receiving parental aid is important. The 1971 freshman norms reported that only 55 percent of all first-time, full-time freshmen received aid from their parents. Between 1971 and 1975, the Basic Educational Opportunity Program (BEOG) was established and income ceilings on other federal and state financial aid programs were raised. In spite of these efforts, college costs rose more rapidly than the availability of financial aid. While the percentage of students receiving aid from parents and from BEOG remained stable from fall 1974 to fall 1975, the percentage of students receiving more than $1,000 from these sources increased. Possibly the added BEOG funds had a pump-priming effect, making parents who could not, or would not, pay for the entire cost of their children's college educations more willing to share the financial responsibility with BEOG or other programs. Possibly Americans became more affluent during these post-recession years and were thus in a better position to assist their children financially. Regardless of the rationale, four-fifths of all students who entered college in 1974 and 1975 received money from their parents, while three or four years earlier only half received such aid.

Three other changes in aid patterns between 1974 and 1975 bear mentioning. First, a 1.7 percent decline in students receiving local/private grants was offset by a 1.6 percent increase in BEOG recipients. Although one cannot infer a cause and effect relationship in this instance, these trends definitely work to the advantage of colleges and universities, particularly those in the private sector. The percentage of students receiving more than $1,000 in aid from local/private sources remained stable, while BEOG recipients at this award level increased by 3.5 percent. Thus, while BEOG did not allow institutions to cut their aid budgets dramatically, it may have eased their burden slightly even in the face of rising costs.

Second, from fall 1974 to fall 1975, there was a 3.9 percent decline in the proportion of students who used savings to finance their college education, and a 4 percent increase in those who used earnings from part-time work. Once again although one cannot prove a causal relationship, there may be one. Perhaps when college costs rise rapidly (as they did in the mid-1970s), students could not save money from their jobs as readily as in previous years. Rather, they were more likely to spend the money as they earned it, before it could become "savings." The result may be seen in the percentage shifts between "savings" and "part-time work" observed here.

Finally, 4 percent more students used part-time employment to finance college, yet their average earnings declined. More college students are working part-time, but only 6.8 percent earned more than $1,000 from this work in 1975, down from 7.9 percent in 1974. Since there was no change in student earnings from the College Work-Study program (CWS), it is likely that many students worked at jobs that were not subsidized by these funds, and at jobs which were off-campus. Although part-time work, in general, is a positive predictor of persistence, part-time work on campus is an even greater predictor. Therefore, if the increase in the proportion of students working part-time is real and not simply an artifact of increased college costs, working students may be risking a higher probability that they will drop out to earn a relatively small amount of money (93 percent earn less than $1,000 per academic year).

The review of sources and amounts of student financial aid has revealed few major changes during the early and mid-1970s. Except for the sharp increases in parents as an aid source, other changes are slight. Perhaps the impact of the BEOG program is reflected in the slight reduction of students receiving local/private grants. However, though 26.6 percent of all students were receiving BEOG funding three years after the program began, there was no significant shift away from other aid sources. The most obvious conclusion is that the increase in the costs of attending college continued to outdistance financial aid programs. Without programs such as BEOG, however, the gap would have been even greater.

A Profile of Aided and Unaided Students

This section compares students in this study who received financial aid with those who did not. There were few demographic differences between the two groups (Table 81). More men than women received aid (52 percent to 48 percent), even though there were 10 percent more women in our sample. There is little difference among age groups although 20-22 year olds are twice as likely not to receive aid (6 percent to 3.1 percent) and students over 22 are more likley to receive aid (2.1 percent to .1 percent). Aid recipients were also more likely to be married than unaided students (2.1 percent to .1 percent). As one would expect, minority students are overrepresented among students receiving aid. Whites comprise 95.3 percent of all unaided students but only 82.4 percent of aid recipients. Blacks show the greatest increase, from 2.1 percent of unaided students to 12.6 percent of aid recipients. Of the remaining ethnic groups, only Americ[illegible]ndians display no change in percentage (.7 percent in both groups). Asian-Americans register a slight increase in aid recipient percentage (1 percent to 1.2 percent) while both Chicanos and Puerto Ricans triple their representation among aid recipients (.6 percent to 1.9 percent and .4 percent to 1.2 percent respectively).

Only 13.5 percent of all financial aid recipients, but 27.8 percent of those without aid, attended public universities. There were few differences between the percentage of all students with and without aid enrolled in private universities and public four-year colleges. Private four-year colleges showed a 3.8 percent increase in students with aid (13.1 percent to 16.9 percent) and two-year colleges had 4.7 percent more of these aid recipients (34.8 percent to 39.5 percent). The most dramatic increase of aid recipients was found in predominantly black colleges where only .5 percent of all unaided students, but 4.3 of all aid recipients, enrolled.

Students were asked a series of questions concerning their current and prospective financial aid problems (Table 82). Probably the most important item asked the students about major debts incurred. Forty-eight and four-tenths percent of all students receiving financial aid said they had such debts, compared to only 28.2 percent of those without aid. The fact that so many aid recipients are in debt helps to explain why so many students who receive only loans drop out--the burden of additional loan repayments on top of existing indebtedness is too great. Additionally, for many aid recipients, parents could not be of financial help. Thirty-six and three-tenths percent of all aid recipients said their parents could not afford to provide funding for their college education. Thus their only option, should grants not cover their expenses, was to accept a loan and increase their indebtedness.

Somewhat surprisingly, approximately the same percentage of students with aid and without aid helped support their families (10 percent). When asked if their parents were willing to support their college education, students receiving aid were almost three times as likely to respond negatively than were unaided students (11.2 percent to 4.3 percent). Although few students were heads of households or single parents, aid recipients were almost five times as likely to be in these categories as were students with no aid (11.4 percent to 2.4 percent).

One group of students who received no aid should be considered separately (Tables 83 and 84). Even with the large amount of need-based aid available, 6 percent of all students with no aid had parents who earned less than $10,000 per year. While it is unclear why these students received no aid, it will be helpful to compare them with their counterparts (those students with parents earning less than $10,000 annually) who did receive aid, and with all students who did not receive aid.

As stated earlier, there were 10 percent more women than men in the study. Among students with low income parents who received no aid, there were 10.2 percent more women, but among students with low income parents who received aid, there were 1.2 percent more men. Among ethnic groups, whites and blacks showed the most notable differences. Among low income nonrecipients, whites accounted for 82.3 percent, but among low income recipients, only 65 percent. On the other hand, blacks represented only 9 percent of low income nonrecipients, but 26.8 percent of low income recipients. Low income American Indians and Asian-Americans both showed a smaller percentage among aid recipients than non aid recipients, while Chicanos and Puerto Ricans displayed an increase from nonrecipients to recipients. As one would expect, low income students without aid were likely to attend public and two-year colleges (with 52.5 percent at the latter). Only 8.3 percent of the low income unaided students attended private or predominantly black institutions.

Unaided students with low income parents were almost twice as unlikely to be worried about costs as were aid recipients in the same parental income group (32.9 percent to 17.2 percent). The fact that 34.5 percent of low income unaided students report major debts is a possible explanation for this finding. The percentage of low income unaided students reporting major debts compares fairly favorably with the average percentage for all unaided students regardless of parental income (28.2 percent) but remains below the percentage for aid recipients in the low income bracket (41.1 percent) and all aid recipients (48.4 percent). Low income nonrecipients were less likely to contribute to family support than low income recipients (11.8 percent to 15.6 percent) but slightly more likely than all nonrecipients (10.4 percent). Low income nonrecipients were significantly more likely to say their parents could support them than were low income recipients (73.7 percent to 32.7 percent), but far less likely to say this than all nonrecipients (93.9 percent). However, fully 11.4 percent of the low-income nonrecipients said their parents would not support them, compared to 8.3 percent of low income recipients and 4.3 percent of all non-recipients. Finally, the low income nonrecipients were less likely to be heads of households or single parents than were low-income recipients or all recipients (7.2 percent to 10.5 percent and 11.4 percent), yet three times as likely to be in one of those categories as the average unaided students (2.4 percent).

In general, aid recipients were more likely than nonrecipients to be male and black, and to attend a private four-year, two-year or predominantly black college. They were more concerned about whether they could afford to attend college; had more major debts; had parents who could not pay for their education; and were more likely to be heads of households or single parents. In most ways, low income nonrecipients fell in a middle ground between other nonrecipients and low income recipients. On key items, however, they were more closely allied to the other nonrecipients. Two factors may explain how they could attend college without aid. First, their existing indebtedness was not significantly higher than that of nonrecipients as a group. Second, as a group, they attended low-cost, public institutions, with over one-half enrolling in two-year colleges.

Next, we examined the financial aid situations of these students categorizing them by their ethnic group and whether they attended a public or a private institution (Table 85). Note that when our sample students are so categorized, the numbers in some cells are small. The following analysis is based on weighted N's of less than 500 each for American Indians, Chicanos and Puerto Ricans not receiving aid in private institutions. Additionally, the question upon which this discussion is based was structured to elicit response only when a statement was applicable to the student. As a result, particularly among nonrecipients, a non-response may mean the statement is not applicable or the student simply did not respond to this question. At this point, it is impossible to sort out these two non-respondent groups. Therefore, these particular findings must be interpreted cautiously.

When asked if they had lost financial aid by dropping out, only two groups not currently receiving aid responded positively--2.7 percent of whites, and 7.1 percent of Chicanos in public institutions. Among aid recipients, less than 10 percent of the students responded positively, regardless of ethnic group or institutional control. The single exception was American Indians at public institutions (10.4 percent). The positive response rate was lower at private institutions than at public for all ethnic groups, except blacks (7.3 percent public and 9 percent private).

Asked whether the aid they received was absolutely necessary for them to attend college, at least 40 percent of the aid recipients in any group responded positively. Private institutions received a higher positive response rate than public institutions from all ethnic groups, except American Indians (70.4 percent public and 55.8 percent private). As one might expect whites and Asian-Americans showed the lowest positive responses. For some strange reason, a small number of unaided students also responded positively to this question. One may only suggest that they misunderstood or are including funding, such as parental support, which was not to be considered in responding to this question.

Students' perceptions of whether they were eligible for aid also differed by ethnic group and institutional control. Among students not receiving aid, all ethnic groups, except whites, believed they were less likely to be eligible for aid at public institutions. Across all categories, the percent of unaided students indicating they believed they were ineligible for aid never exceeds 47.7 percent. However, we may not definitely categorize the majority of unaided students as believing they were eligible for aid because of the non-response problem already mentioned. On the other hand, there may be conflict of perception and reality concerning aid for some students. The two most obvious cases of perception of eligibility and reality of aid receipt not being the same was found among Chicanos and Puerto Ricans at private institutions. Only 21.9 percent of the Chicanos not receiving aid at private colleges believed they were ineligible for aid. Even more surprising is the finding that only 8.7 percent of the Puerto Ricans not receiving aid at private institutions believed they were ineligible. Overall, there may be a gap between student expectation and aid received but the gap for these two groups is particularly noticeable.

Surprisingly, a number of students did not believe they were eligible, yet received aid. This finding, coupled with the data on nonrecipients may be explained to some degree by the emphasis placed on applying for aid. Families know that college is expensive, and most believe it is beyond the family's means to finance it entirely. With this belief and the advice of secondary counselors and college representatives to apply for aid because "it can't hurt," there may be an overly high expectation of success created for many applicants. This unrealistic expectation could result in the apparently low percentage of unaided students who believe they were ineligible and the number of students who were surprised to receive aid. The problem that exists should not be resolved by reduced financial aid applications, but by a more realistic assessment of the student's financial situation by the family, counselors, and college representative at the time of application.

When the responses concerning perceptions of eligibility are related to actual application, some interesting findings appeared. Among unaided students, whites were the least likely not to apply in both public and private instituitons. Among the minority groups, blacks, American Indians and Asian-Americans average 30 percent to 40 percent not applying for aid among unaided students. The percentage not applying for aid and the percentage not believing they were eligible for aid among whites, blacks, American Indians and Asian-Americans are quite similar. For Chicanos and

Puerto Ricans who did not receive aid, there is a different picture. At public institutions, the percentage of these students who did not think they were eligible for aid is more than twice the number who did not apply (47.7 percent versus 21 percent for Chicanos; 46.7 percent versus 19.6 for Puerto Ricans) and at private colleges, three times more Chicanos (21.9 percent) thought they were ineligible than the percentage of students who did not apply (7.3 percent). Among Puerto Ricans at private colleges, however, three times more students did not apply (27.5 percent) than the percentage who did not believe they were eligible (8.7 percent).

Once again, there is a small percentage of students who did not apply but are receiving aid. The two groups which benefit most in this situation are whites and, especially, Asian-Americans. One may only guess, but these students may be more likely to receive non-need based aid such as presidential awards than the other ethnic groups whose need is greater and is served by need-based aid for which they must apply. Frankly, some institutions may be saving some discretionary funding for students who will not receive need-based aid yet might be enticed to enroll by an unexpected "honors" grant.

Why did some students who might be eligible not apply for aid? Students commented on three possible reasons. First, they were asked if the financial aid applications were too long. There was little evidence among recipients or nonrecipients to indicate that this was an inhibiting factor. Only two groups showed a positive response rate over 10 percent--Asian-Americans at public institutions who were receiving aid (23.1 percent) and Puerto Ricans at public instituitons who were not receiving aid (22.5 percent). Students were also asked if fear of increasing indebtedness kept them from applying for aid. Once again, the positive response was under 10 perent for all groups except two---American Indians with aid at private instituitons (12.4 percent) and Puerto Ricans without aid at public institutions (14.1 percent). Third, students were asked if they knew what financial aid options were available. In general, most students did know, but there were more exceptions than in previous questions. Among unaided students, the groups were blacks (16.1 percent), American Indians (11.7 percent), and Puerto Ricans (27.6 percent) in public institutions and American Indians in private institutions (21.2 percent). Among aid recipients, only Chicanos in public institutions (17.9 percent) showed a response rate of over 10 percent. In general, students at private institutions were less likely to offer these three factors as reasons for not applying for aid.

Next, students were asked to evaluate their overall experiences involving financial aid. It should be noted that respondents considered their experiences for both the 1975-76 and 1976-77 academic years. As one would expect, only small percentages of unaided students reported a generally favorable experience. Only Chicanos (17.9 percent) at public institutions showed a noticeably favorable response. Among aid recipients, there were higher degrees of satisfaction, but not overwhelmingly so. The range of positive response was from 30.4 percent for Chicanos at public institutions to 65.4 percent for Puerto Ricans at public universities. White and Asian-American aid recipients were, in general, less favorable. Only Puerto Ricans showed a noticeably more favorable response (65.4 percent) in the public sector than in the private (48.3 percent), although blacks and Asian Americans were equally favorable in both sectors (approximately 50 percent). When the question was reworded to ask if students' financial aid experiences were unfavorable, a different pattern emerged. Both recipients and nonrecipients responded similarly. Among nonrecipients, Puerto Ricans at public institutions (53 percent) were most likely to have had an unfavorable experience, while no Puerto Ricans at private institutions reported an unfavorable experience. Among aid recipients, Puerto Ricans at private institutions showed the greatest percentage of unfavorable experiences (32.1 percent) and Asian Americans at private institutions the least (7.4 percent). Overall, Chicanos reported the least unfavorable experience (8.4 percent public; 8.6 percent private). Among aid recipients, public institutions generally fared better than private ones, but the reverse was true among unaided students.

Finally, we examined data on the number of sources of financial aid information students consulted (Table 86). The pattern was quite clear, especially in the private sector. Students who consulted only one source were significantly less likely to be receiving aid. Students who consulted two or three sources of information were more likely to receive aid, with the single exception of black students in the public sector (47.3 percent not receiving and 37.6 percent receiving). By the time four or more sources were consulted, all students regardless of race or institutional control were significantly more likely to be receiving aid.

In general, our analysis of students' financial aid experiences has revealed few unexpected differences among ethnic groups, with the possible exception of eligibility perceptions of Chicanos and Puerto Ricans. It appears generally that private institutions have produced more positive climates than have public institutions, yet there are exceptions. Clearly, however, the more sources of financial aid students consult, the greater their chances are of receiving aid. Next we examined the actual distribution of aid funds at different types of colleges.

Financial Aid Awards for Returning Second Year Students

(1976-77 Acadmic Year)

This section discusss the actual distribution of financial aid among students beginning their second year of college (1976-77). The second year was chosen to examine the aid environment for students who persist. In their second year many students can no longer rely on the "one-shot" grants they may have received from secondary schools, clubs or businesses. As a result, we may focus on continuing sources of aid, not money given only to freshmen.

There are three main sources of financial aid--grants (Table 87), loans (Table 88), and college work study (Table 89). As has been shown in this report, the grant is the heart of most financial aid packages which encourage persistence. Originally given as a reward for academic achievement, the grant is now based primarily on financial need. White students received the lowest percentage of grant aid at all types of institutions, except private universities, where blacks received the lowest as grant aid. Among other ethnic groups, Puerto Ricans received the highest percentage of aid as grants at private universities and public four-year colleges, and were tied for first with blacks at two-year schools. Asian-Americans received the highest percentage of aid given as grants by public universities.

Turning to sex differences in patterns of financial aid, white women received less grant aid than white men at all types of institutions except private four-year colleges, where they received 3.2 percent more. Also white women received less grant aid than women of all other ethnic groups, regardless of institutional type. Among blacks, men and women were awarded similar percentages of grant aid at public institutions, but women received

11.9 percent more at private universities and 13 percent more at private four-year colleges. Among American Indians, both sexes received similar percentages of grant aid at public universities and four-year colleges, but at private instituitons, men received 6.4 percent more grant aid at universities, women 11.5 percent more at four-year colleges. Asian-American men were awarded more grant aid than Asian-American women across all institutional types (the difference, however, was only 1 percent at public universities). Chicano aid recipients showed a pattern similar to that for blacks. Men received more grant aid than did women at all public and two-year institutions but less than women at private institutions.

The level of grant support given to Chicano men at private universities may be a cause for concern. Chicano males received only 48.9 percent of their aid as grants, compared to 84.1 percent for women. Finally Puerto Ricans had a unique pattern of financial aid. Women received more grant aid at universities, but men received more at public four-year colleges and two-year institutions. As with Chicanos, there was a very great disparity between the grant aid received by women and men in part of the private sector. At private four-year colleges, while Puerto Rican women received 84.3 percent of their aid as grants, men received only 50.4 percent of their aid in this form.

The second major type of aid is loan aid (Table 88). As one would expect, students' percentage of financial aid from loans was higher at private institutions than public ones. Overall, whites received more of their aid as loans than did any other ethnic group. They were awarded the greatest proportion of loan aid in both public universities and public four-year colleges, and were tied with American Indians and Asian-Americans at private four-year colleges and with American Indians at two-year institutions. Only at private universities did another group--blacks--receive a higher percentage of loan aid than did whites.

Analyzing the data by sex, white women received more loan aid than did white men, except in private four-year colleges where men received 1.1 percent more loan aid. Among blacks, men received more loan aid than women in all instituitonal categories except predominantly black colleges at which women received 2.4 percent more. At public institutions and two-year colleges there were scant differences between the sexes. At private universities, not only did men receive 10 percent more loan aid than women, but they received 37.4 percent of their entire aid package in the form of loans. Blacks at private universities received approximately one-third of their aid in the form of loans, a higher proportion than that for any other ethnic group in any type of institution. Among American Indians, there were few sex differences in loan aid, but women at public four-year institutions received 19 percent more aid as loans than did men, and women at two-year institutions received 15.6 percent more loan aid. Asian-American women received more loan aid than men at all types of institutions except public universities, where there was no difference. Chicano women received more loan aid than women at all public and two-year institutions, and the sexes were identical at private four-year colleges. The small percentage of grant aid Chicano men at private universities received was compensated by their large amount of loan aid (38.6 percent). Among Puerto Rican students, men received more loan aid at universities, women received slightly more loan aid at public four-year colleges and two-year institutions. As did Chicano men at private universities, Puerto Rican men at private four-year colleges received a very large percentage of their aid in the form of loans (42.3 percent). For both these groups, their heavy loan burden may have increased their chances of dropping out.

The third major source of financial aid is the college work study program (CWS). It is often used as discretionary funding for students who cannot meet their college expenses with grant and loan aid. Overall, the CWS program supplied less than 10 percent of all financial aid at universities and public four-year colleges and less than 15 percent at private four-year colleges and two-year institutions. Whites and blacks were most likely to receive CWS aid, and American Indians were the least likely, except at public four-year colleges where men received 18.4 percent of their aid as CWS. The only other group that received much CWS is Puerto Rican women at two-year schools. They received 22.4 percent of their aid as CWS. Only four groups received less than 1 percent of their aid as CWS. Three of these groups--American Indian women at four-year public colleges and two-year schools and Puerto Rican men at public universities--attended public colleges. The fourth group was American Indian men at private universities. Interestingly, each sex and every ethnic group at private four-year colleges received at least 3.5 percent of their aid from CWS.

Having discussed the three major types of financial aid, we will now add parental income as a control variable and examine seven specific financial aid sources: Basic Educational Opportunity Grant (BEOG), Supplemental Educational Opportunity Grant (SEOG), College Work Study (CWS), Federally Insured Student Loan (FISL), National Direct Student Loan (NDSL), state grants, and local/private grants. By adding the parental income variable, we can compare the groups actually benefitting from these programs with the groups they were intended to serve.

As previously shown, only three years after its inception in 1972, BEOG funding was reaching 26.6 percent of all entering freshmen. Since it is awarded entirely upon financial need, one would expect to find students who received it concentrated in the lower income brackets. This is indeed the case (Table 90). However, some students whose parents earned more than $20,000 a year were receiving BEOG aid, particularly among whites, blacks, and American Indians. Given BEOG's income ceiling, it was not intended to provide funds for these students.

The greatest percentage of BEOG aid was received by black students at public universities and two-year schools, and by blacks and Puerto Ricans at private universities. Puerto Ricans received their highest percentage of BEOG at four-year colleges. Low income whites, blacks, American Indians, and Chicanos received their highest percentage of BEOG aid at two-year schools and low income whites, blacks, American Indians and Asian-Americans received their lowest percentage at private universities. Asian-Americans and Chicanos were awarded their highest percentage at public four-year colleges. Low income Puerto Rican students received 56.8 percent of their aid as BEOG at private four-year colleges, but only 10.3 percent of their aid at public universities was BEOG. It is unclear why the latter percentage was so low, considering that 57.7 percent of the aid to Puerto Ricans with parental incomes between $10,000 and $20,000 at public universities was BEOG.

SEOG funding was generally awarded to low income students who had already received the maximum allowable amounts from other sources, particularly BEOG. It is restricted by income and was seldom a large portion of a students' financial aid package. Virtually all SEOG funding in this study was awarded to students whose parents earned less than $20,000 a year (Table 91). It provided at least 10 percent of the financial aid to four groups of students whose parents earned less than $20,000--blacks in public four-year colleges, American Indians in private universities, Asian-Americans in public universities and Puerto Ricans in two-year schools. SEOG also provided some aid for three groups whose parents earned over $20,000--whites in private institutions, American Indians in public universities and Chicanos in private four-year colleges.

The most important finding concerning CWS is that it provided financial aid for whites of all income levels at all types of institutions (Table 92). In addition, only at two-year schools did no blacks with incomes over $20,000 receive CWS support. In general, CWS provided minor support to students.

Although NDSL funding has an income ceiling for all recipients, whites with parental incomes over $20,000 received NDSL aid at all types of institutions (Table 93). Furthermore, university-attending blacks and Asian-Americans received such aid as did blacks, American Indians and Chicanos at four-year colleges, even though all these groups had parental incomes over $20,000. In fact, 23.2 percent of all aid for Chicanos in this income bracket came from NDSL aid. Thus, while NDSL funding unquestionably served low and low/middle income students, as intended, it also appeared to be helping support students whose incomes exceeded the stipulated NDSL ceiling.

The FISL program was intended to supplement NDSL funding, and it does not have the same income ceiling. The college recommends funding for students, who in turn must negotiate a loan with a bank. FISL is usually recommended to students who want additional financial aid but are above the income ceiling for other programs or have reached their computed financial need. Virtually all white college students received some percentage of their aid as FISL, with their percentage of FISL aid rising as their income increased (Table 94). Students at private four-year colleges were the most likely to receive FISL funding. Chicanos and Puerto Ricans were the ethnic groups least likely to receive it. FISL support was particularly valuable to Asian-Americans with parental incomes over $20,000 who attended private four-year colleges. All in all, FISL funding seemed to be serving its purpose as supplemental aid for middle and upper income students, but its role in persistence is undefined. It is only seldom used by the low income students who are least able to handle additional debts with the exception of low income blacks at private universities who receive 16.2 percent of their aid as FISL and low income American Indians at private four-year colleges who received 15.1 percent of their aid in this form.

State grants are usually awarded for academic performance as well as financial need. As a result, one would expect a wider distribution of this aid throughout income levels than is the case for strictly need-based aid (Table 95). Actually, while high income whites, blacks and Asian-Americans sometimes received state grants, almost no American Indians, Chicanos or Puerto Ricans in this income bracket did. This finding may well be the result of a limited number of high income students in these ethnic groups in the population. Among low income students, Asian-Americans, partiuclarly those at public universities and private four-year colleges, relied most heavily on these awards. Although low income Puerto Rican students at public universities received only 10 percent of their aid as BEOG, they received 42.4 percent in state grants, more than from any other source of aid. So far as institutional types are concerned, students in public universities were the most likely to receive substantial assistance from state grants and those at public four-year colleges were the least likely.

The category of local/private grants includes both instituitonal funds and funds from external sources. Unfortunately there is presently no way to separate these types of grants. Some of these awards are need-based, and others are not (Table 96). As with state grants, whites, blacks and Asian-Americans benefitted at all income levels and in almost all types of institutions. Asian-Americans and four-year college students whose parents earned $20,000-$30,000 seemed to benefit most. Among low income students, only Asian-Americans and American Indians at private institutions gained substantially from these awards. The ethnic group gaining least from local/private grants was Puerto Ricans. Thus, local/private grants were most useful to middle income students who had to contend with the income ceilings imposed by other types of aid.

In an attempt to assess the influence of students' academic performance in college on their financial aid awards, we analyzed the seven particular aid programs by the students' college GPA's. Two problems arose. First, many N's for cells were too small to be useful. Second, there appears to be little relation due to the need-based nature of almost all the aid programs. The local/private grant category was an exception since its awards were less based on need than those of the other programs (Table 97). When low income students earning A and B grades were compared with low income students with B- and C grades, the results were most intriguing. At public institutions and two-year schools, as GPA rose, so did local/private grant aid awards. At private institutions, however, blacks, Chicanos and American Indians with low GPA's received more local/private aid than did those students with A and B averages. While there is no definite explanation for such a phenomenon, private institutions may be identifying minority students who are less likely to persist, and providing these students with a financial incentive to continue. On the other hand, private instituitons may be leaving themselves open to the criticism that they are "buying" needed minority enrollments. This finding merits further study.

Summary of Findings

Trends in Financial Aid

- Parents increased 25 percent as a source of financial aid for students during the years 1971-1975.
- By 1975, within three years of its inception in 1972, BEOG was employed as a source of aid by over one-quarter of all first-time, full-time freshmen.

Profiles of Aided and Unaided Students

- Students who received aid were more likely than nonrecipients to be male, black, to worry about aid and to attend private institutions.
- Students who received aid were more likely than nonrecipients to have major expenses or debts; to have parents who could not assist them financially; and to be heads of households or single parents.
- Six percent of the students who attended college with no financial aid had parental incomes of less than $10,000 a year. Apparently, these students could attend without aid because they attended two-year institutions.
- Students in private institutions were somewhat more likely than others to say that financial aid enabled them to attend college.
- More blacks and fewer whites applied for financial aid than did other ethnic groups.
- White and Asian-American aid recipients were less likely than others to say they had a favorable financial aid experience.
- The more sources of financial aid students consulted, the more likely they were to receive financial aid.

Financial Aid Awards for Returning Students
(Academic Year 1976-77)

- Whites received the smallest share of their aid as grants and the largest share as loans and college work study funds.

- Blacks received the lowest percentage of grant aid at private universities and the highest percentage of loan aid.

- White and Asian-American women received less grant aid and more loan aid than white and Asian-American men at virtually all types of institutions.

- Chicano men at private universities received less grant aid (49 percent of their aid package) and more loan (39 percent) than did any other ethnic group.

- Puerto Rican men at private four-year colleges received relatively little aid as grants (50 percent) and the highest percentage of aid as loan (42 percent).

- Students whose parents earned low incomes received most of the BEOG awards. As parental income increased, the percentage of aid packages funded by BEOG decreased.

- Students with middle income parents received more funding from state and local/private grants than did other students.

- Most FISL funds went to students in private institutions and to children of middle and upper income parents.

- NDSL money provided substantial support to low and middle income students, but some students at private institutions and public universities whose parents earned more than $20,000 a year also received NDSL.

- There is evidence that blacks and Chicanos at private institutions received local/private grant aid independent of their academic achievement in college.

Implications for Policy

Having described the college students' financial aid situation during the years covered by this study, (1975-1977) some policy implications are forthcoming.

It appears to be evident that in the mid-1970s college costs increased faster than funds available through financial aid programs. All traditional sources of aid were being used as much as, or in the case of parents, more than they ever had been. Since these data were collected, the federal government has raised allowable income ceilings and increased available funding. Despite these efforts, however, inflation has taken its toll, and the college costs-college aid gap has not narrowed, particularly at private institutions. As long as the maximum amount of BEOG aid students can get is less than half the tuition of the average private institution, the financial plight of students wishing to attend these schools--and of the schools themselves--remains serious. Since these data were collected, much government action has involved expanding students' loan options. This study shows, however, that students receiving loans are less likely than others to persist and that students receiving aid are more likely than others to be in debt. Therefore, alternatives to increasing loan options, including an increased BEOG maximum for the private sector, should be considered.

Not only has the federal government expanded loan options, but many private colleges and universities have begun to set minimal amounts of loan aid which every aid student must accept if s/he is to receive the maximum amount of aid. In doing so, these schools are simply trying to stretch their financial budgets. Yet a number of aid recipients are already in debt, and because students with loans are disproportionately likely to drop out, requiring all aid recipients to take out loans seems counterproductive for institutions that most want to retain their students. Taking differential effects of parental income into account, aid offices would be well-advised, according to the findings of this study, to adjust scholarship and loan awards and stop insisting that all their aid recipients take out loans.

In addition, financial aid sources should be publicized much more than they are at present. Our evidence shows that the more sources of financial aid a student knows about, the more likely the student is to receive the aid s/he needs. The federal government has done a reasonably good job of making students aware of federal aid sources, judging by the rapid increase in the use of BEOG funding. The real burden, however, must be shouldered by the secondary school counselors. They are the "in-house" experts on financial aid and they must be as well informed as possible.

Our findings also suggest that some colleges and universities should reexamine their policies in the awarding of aid to minority students. It would certainly be in the best interests of private colleges and universities to find out why all blacks, and Chicano and Puerto Rican men receive so little financial aid in the form of grants. Do such students simply not apply for grants or have they been unconsciously slighted? Obviously, giving minorities much of their aid in loans hurts both the student and the college. Similarly, colleges should investigate why white and Asian-American women at all types of institutions received less grant money and more loan money than others. Are institutions unwilling to invest in women for fear they will not persist, or are these women less likely to apply for grant support than are men?

Private institutions should be aware that they may be giving financial aid to blacks, Chicanos and American Indians independent of the students' academic achievement. If private institutions are following this financial aid policy with the hope of sustaining the college careers of minority students, they must make this clear, since such a policy could be open to some criticism. Should minority students be retained in school and given aid independent of their performance? Is such a financial aid policy fostered by a firm belief in affirmative action or by the institution's need for government funding to survive?

Finally, policy makers should be concerned about the large number of seemingly high income students who benefit from programs such as BEOG and NDSL. Do the recent federal regulations liberalizing eligibility for these programs really acknowledge existing practices rather than establish new ones? In either case, it would be instructive to learn how some financial aid programs evolved into "discretionary" funding for high income students during the mid-1970's. Although each of these programs has an income ceiling for eligibility, our data showed that some students with parental income over $20,000 were receiving BEOG, and especially, NDSL funding in apparent violation of these ceilings.

Table 80

Types of Aid Received in 1974 and 1975
(Percent of Freshmen Receiving)

Type of Aid	Total Aid		Aid over $1,000	
	1974	1975	1974	1975
Parental aid	80.4	79.8	37.2	38.8
BEOG	25.0	26.6	4.8	8.2
SEOG	6.4	6.4	1.0	1.1
State grant	18.9	18.3	3.7	3.8
Local/private grant	19.7	18.0	3.8	3.8
FISL	10.0	9.5	4.8	5.3
NDSL	9.1	9.6	2.4	2.9
College-work study	12.5	12.2	0.9	0.8
Part-time work	70.0	74.0	7.9	6.8
Full-time work	11.4	8.7	2.9	2.2
Savings	56.6	52.7	7.5	6.8

Table 81

Demographic Characteristics of Students With and Without Financial Aid[1]

Characteristic	Students without Aid	Students with Aid
Sex		
Men	42.0	52.0
Women	58.0	48.0
Age		
16-17	3.1	3.6
18-19	90.7	91.2
20-22	6.0	3.1
over 22	.1	2.1
Race		
White	95.3	82.4
Black	2.1	12.6
American Indian	.7	.7
Asian-American	1.0	1.2
Chicano	.6	1.9
Puerto Rican	.4	1.2
Instituitonal type		
public university	27.8	13.5
private university	4.3	5.6
public four-year college	19.5	20.3
private four-year college	13.1	16.9
two-year college	34.8	39.5
predominantly black college	.5	4.3
Veteran status		
no	98.8	98.3
yes	1.2	1.7
Marital status		
single	99.9	97.9
married	0	1.1
married (not living with spouse)	.1	1.0

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[1] Data for the academic year 1976-77.

Table 82

Financial Situation of Students With and Without Financial Aid[1]

Situation	Students without Aid	Students with Aid
Are you concerned about financing your education		
no	51.4	26.4
some	42.8	53.4
a lot	5.7	20.2
I have major expenses/debts		
no	71.1	51.6
yes	28.2	48.4
I contribute to my family's support		
no	89.6	90.0
yes	10.4	10.0
My parents have a low income and cannot help with my college expenses		
no	93.9	63.7
yes	6.1	36.3
My parents are not willing to help pay for my college expenses		
no	95.7	88.8
yes	4.3	11.2
Head of household or single parent		
no	97.6	88.6
yes	2.4	11.4

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[1] Data for the academic year 1976-77

Table 83

Demographic Characteristics of Low Income[1] Students With and Without Financial Aid[2]

Characteristic	Students without Aid	Students with Aid
Sex		
Men	44.9	50.6
Women	55.1	49.4
Age		
16-17	4.0	5.0
18-19	94.0	92.0
20-22	3.0	2.0
over 22	.0	1.0
Race		
White	82.3	65.0
Black	9.0	26.8
American Indian	1.2	1.9
Asian-American	3.0	1.6
Chicano	2.8	3.1
Puerto Rican	1.7	2.7
Instituitonal type		
public university	17.1	10.2
private university	.9	16.7
public four-year college	22.1	19.7
private four-year college	5.3	13.4
two-year college	52.5	44.6
predominantly black college	2.1	9.5
Veteran status		
no	99.8	96.1
yes	.2	3.9
Marital status		
single	99.5	96.6
married	0	3.0
married (not living with spouse)	.5	.4

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[1] Low income refers to parental income below $10,000 per year.

[2] Data for academic year 1976-77

Table 84

Financial Situation of Low Income[1] Students With and Without Financial Aid[2]

Situation	Students without Aid	Students with Aid
Are you concerned about financing your education		
no	32.9	17.2
some	46.2	54.1
a lot	20.9	28.7
I have major expenses/debts		
no	65.5	58.9
yes	34.5	41.1
I contribute to my family's support		
no	88.2	84.4
yes	11.8	15.6
My parents have a low income and cannot help with my college expenses		
no	73.7	32.7
yes	26.3	67.3
My parents are not willing to help pay for my college expenses		
no	88.6	91.7
yes	11.4	8.3
Head of household or single parent		
no	92.8	89.5
yes	7.2	10.5

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[1] Low income refers to parental income below $10,000 per year

[2] Data for academic year 1976-77

Table 85

Financial Aid Experiences of Students With and Without Financial Aid by Race and Institutional Control[1]

Experiences	Aid Status	White		Black		American Indian		Asian-American		Chicano		Puerto Rican	
		Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Lost aid because dropped out	no	2.7	*	*	*	*	*	*	*	7.1	*	*	*
	yes	6.4	3.3	7.3	9.0	10.4	1.0	5.6	1.1	6.8	3.4	7.3	*
Aid enabled me to attend school	no	3.0	1.2	11.3	5.9	4.3	*	7.4	*	9.1	*	*	*
	yes	41.4	50.0	56.7	62.4	70.4	55.8	40.0	56.5	53.4	72.5	12.7	67.2
Didn't think eligible for aid	no	36.9	43.6	40.0	33.3	41.8	39.3	42.0	33.0	49.7	21.9	46.7	8.7
	yes	16.9	15.2	7.6	8.9	16.0	8.3	13.8	16.5	21.3	7.3	25.2	1.3
Didn't apply for aid	no	40.1	48.5	33.9	30.2	32.2	39.7	36.3	31.5	21.0	7.3	19.6	28.5
	yes	10.2	8.2	3.9	3.6	2.0	10.9	12.3	15.9	3.9	4.8	3.3	1.3
Financial aid forms too long	no	2.7	.6	1.7	.8	1.6	*	4.2	9.8	.5	*	22.5	*
	yes	2.7	1.2	2.1	2.2	*	1.2	23.1	4.4	4.7	*	2.7	4.6
Didn't want to get further in debt	no	4.9	1.2	9.9	1.2	7.1	8.2	1.9	*	*	*	14.1	*
	yes	5.6	8.5	7.4	6.8	9.9	12.4	7.2	4.5	5.4	4.9	6.5	3.5
Didn't know aid options	no	8.3	3.6	16.1	6.2	11.7	21.2	9.6	5.5	.9	8.9	27.6	0
	yes	4.7	4.2	7.6	5.1	2.8	6.2	9.7	9.4	17.9	7.3	4.3	0
Experiences generally favorable	no	4.6	1.2	10.1	4.2	4.3	*	9.7	5.8	17.4	*	*	*
	yes	38.2	44.7	51.3	50.5	50.7	51.8	31.3	41.3	30.4	59.9	65.4	48.3
Experiences generally unfavorable	no	20.3	17.9	20.2	17.5	30.6	4.5	18.3	23.3	7.2	8.9	5.3	*
	yes	18.8	19.1	11.3	11.6	23.7	20.1	14.7	7.4	8.4	8.6	14.5	32.1

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[1] Respondents experiences may include both the 1975-76 and 1976-77 academic years, whereas all other data has drawn upon 1976-77 alone.

*N too small to report percent.

Table 86

Proportion of Students with and without Financial Aid by Race and Number of Sources Contacted about Financial Aid

Student	Aid Status	0 to 1 Source		2 to 3 Sources		4 or more Sources	
		Public	Private	Public	Private	Public	Private
White	no	62.1	66.0	27.9	24.9	10.0	9.1
	yes	31.3	27.8	46.4	46.2	22.3	26.0
Black	no	38.4	52.3	47.3	36.2	14.2	11.5
	yes	26.6	19.0	37.6	52.1	35.8	30.9
American Indian	no	73.7	81.4	20.4	0	6.0	18.6
	yes	17.1	28.0	57.2	44.5	25.7	27.5
Asian-American	no	57.0	63.6	37.0	30.6	6.0	5.8
	yes	42.4	32.0	43.7	41.7	13.9	26.3
Chicano	no	70.1	71.2	24.8	28.8	5.0	*
	yes	13.2	24.2	66.2	49.5	20.6	26.3
Puerto Rican	no	40.6	88.8	50.6	11.2	8.8	*
	yes	16.2	37.0	42.2	34.6	41.6	28.4

*N too small to report percent.

Table 87

Grant as a Percent of Total Aid by Race, Institutional Type and Sex

	Public University		Private University		Public Four-Year		Private Four-Year		Two-Year		Predominantly Black	
Student	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
White	67.8	63.6	73.3	62.5	69.5	62.5	60.0	63.2	77.7	69.6	*	*
Black	75.5	76.0	56.3	68.2	78.2	78.4	62.1	75.1	86.1	83.2	78.5	78.5
American Indian	79.7	80.6	76.8	70.4	75.4	74.7	60.9	72.4	85.8	74.1	*	*
Asian-American	85.9	84.7	78.1	66.7	92.0	82.5	74.3	67.9	78.8	74.8	*	*
Chicano	83.9	78.4	48.9	84.1	91.5	78.9	78.4	80.2	87.1	80.7	*	*
Puerto Rican	79.3	80.8	78.7	81.9	97.2	89.2	50.4	84.3	93.1	75.7	*	*

[1] Data for academic year 1976-77

[*] N too small to report percent.

Table 88

Loan as a Percent of Total Aid by Race, Institutional Type and Sex

Student	Public University		Private University		Public Four-Year		Private Four-Year		Two-Year		Predominantly Black	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
White	19.2	27.0	21.4	30.5	18.6	30.3	24.9	23.8	17.0	17.8	*	*
Black	15.9	15.1	37.4	26.6	15.2	14.1	19.5	13.8	9.6	8.7	9.7	12.1
American Indian	17.9	17.8	23.2	21.7	6.2	25.2	26.9	22.5	11.1	25.7	*	*
Asian-American	7.0	7.4	16.6	22.6	4.2	14.3	22.2	25.6	5.5	16.5	*	*
Chicano	9.4	13.9	38.6	15.1	1.0	10.5	15.4	14.7	6.8	12.3	*	*
Puerto Rican	20.5	10.5	17.6	14.3	1.4	2.7	42.3	11.4	0.1	1.9	*	*

[1] Data for academic year 1976-77.

* N too small to report percent.

Table 89

College Work-Study as a Percent of Total Aid by Race, Institutional Type and Sex[1]

	Public University		Private University		Public Four-Year		Private Four-Year		Two-Year		Predominantly Black	
Student	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
White	12.9	9.4	5.3	7.0	11.9	7.2	15.1	13.0	5.2	12.5	*	*
Black	8.5	8.9	6.3	5.2	6.6	7.4	18.4	11.1	4.3	8.1	11.8	9.4
American Indian	2.4	1.6	*	8.0	18.4	*	12.2	5.1	3.1	*	*	*
Asian-American	7.1	7.9	5.3	10.7	3.9	3.2	3.5	6.6	15.7	8.8	*	*
Chicano	6.7	7.7	12.5	1.0	7.5	10.5	6.3	5.2	6.1	7.1	*	*
Puerto Rican	*	8.7	3.8	3.9	1.3	8.1	7.3	4.3	6.8	22.4	*	*

[1] Data for academic year 1976-77.

* N too small to report percent.

Table 90

Basic Educational Opportunity Grant Aid as a Percent of Total Aid by Race, Institutional Type and Parental Income[1]

Student	Parental Income	Public University	Private University	Public Four-Year	Private Four-Year	Two-Year	Predominantly Black
White	< $10,000	27.1	22.9	32.3	23.0	39.6	*
	$10,000-19,999	9.6	4.1	16.1	10.2	12.5	*
	$20,000-29,999	5.0	1.0	6.6	2.6	4.4	*
	>$30,000	*	1.0	4.7	2.4	11.3	*
Black	< $10,000	56.7	26.2	53.6	33.2	63.6	53.4
	$10,000-19,999	27.7	15.5	34.2	21.8	50.1	35.1
	$20,000-29,999	15.0	*	70.9	6.1	78.5	18.8
	>$30,000	1.3	*–	*	*	*	6.7
American Indian	< $10,000	49.3	12.4	26.8	19.0	54.4	*
	$10,000-19,999	9.3	8.6	3.3	4.4	18.1	*
	$20,000-29,999	*	16.9	68.3	*	41.6	*
	>$30,000	*	*	*	*	*	*
Asian-American	< $10,000	33.4	20.6	63.8	31.9	51.3	*
	$10,000-19,999	9.7	5.1	9.1	10.7	33.7	*
	$20,000-29,999	3.9	*	*	1.3	*	*
	>$30,000	*	*	35.9	*	*	*
Chicano	< $10,000	36.0	19.8	18.6	26.6	39.9	*
	$10,000-19,999	22.9	9.0	13.7	13.2	47.8	*
	$20,000-29,999	*	*	*	11.9	*	*
	>$30,000	*	*	*	*	*	*
Puerto Rican	< $10,000	10.3	28.2	54.1	56.8	50.2	*
	$10,000-19,999	57.7	17.9	52.3	28.9	50.8	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*

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[1] Data for academic year 1976-77.

*N too small to report percent.

Table 91

Supplemental Educational Opportunity Grant Aid as a Percent of Total Aid by Race, Institutional Type and Parental Income[1]

Student	Parental Income	Public University	Private University	Public Four-Year	Private Four-Year	Two-Year	Predominantly Black
White	<$10,000	3.4	5.1	3.0	3.7	3.3	*
	$10,000-19,999	1.9	1.4	1.3	1.9	1.1	*
	$20,000-29,999	*	5.9	*	2.4	*	*
	>$30,000	*	1.1	*	*	*	*
Black	<$10,000	3.8	3.3	9.3	5.9	2.3	8.4
	$10,000-19,999	4.5	2.8	10.4	2.8	2.5	3.6
	$20,000-29,999	*	*	*	1.9	*	2.1
	>$30,000	*	1.0	*	*	*	2.7
American Indian	<$10,000	3.9	12.4	2.7	6.5	*	*
	$10,000-19,999	2.7	7.4	4.2	1.8	8.4	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*
Asian-American	<$10,000	9.7	1.6	7.8	*	*	*
	$10,000-19,999	3.5	1.0	*	2.0	*	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*
Chicano	<$10,000	7.3	12.8	22.7	5.1	*	*
	$10,000-19,999	6.7	1.2	*	4.2	*	*
	$20,000-29,999	*	*	*	7.7	*	*
	>$30,000	*	*	*	*	*	*
Puerto Rican	<$10,000	8.7	6.1	7.2	9.4	4.8	*
	$10,000-19,999	*	4.1	3.0	1.9	11.0	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*

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[1] Data for academic year 1976-77.

* N too small to report percent.

Table 92

College Work-Study Program as a Percent of Total Aid by Race, Institutional Type and Parental Income[1]

Student	Parental Income	Public University	Private University	Public Four-Year	Private Four-Year	Two-Year	Predominantly Black
White	<$10,000	7.2	6.6	4.3	8.8	7.1	*
	$10,000-19,999	11.9	3.8	9.7	11.2	12.0	*
	$20,000-29,999	13.1	7.4	13.7	14.4	3.0	*
	>$30,000	16.6	9.1	12.1	35.3	13.9	*
Black	<$10,000	8.2	5.7	4.9	9.1	6.9	9.3
	$10,000-19,999	12.8	6.6	3.4	13.9	7.1	13.4
	$20,000-29,999	2.3	4.3	*	11.8	*	6.2
	>$30,000	7.9	4.9	32.3	63.9	*	2.7
American Indian	<$10,000	2.5	2.7	2.9	2.0	*	*
	$10,000-19,999	2.0	3.8	36.8	6.1	*	*
	$20,000-29,999	*	*	*	45.8	*	*
	>$30,000	*	*	*	*	16.2	*
Asian-American	<$10,000	1.3	6.3	3.8	9.6	14.4	*
	$10,000-19,999	13.3	4.7	*	3.2	4.6	*
	$20,000-29,999	7.2	12.6	*	1.3	*	*
	>$30,000	*	*	*	*	*	*
Chicano	<$10,000	5.2	4.3	5.5	6.9	4.8	*
	$10,000-19,999	8.5	6.3	11.4	6.2	*	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*
Puerto Rican	<$10,000	*	4.8	3.7	1.5	11.2	*
	$10,000-19,999	3.6	3.7	7.2	8.7	*	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*

[1] Data for academic year 1976-77.
* N too small to report percent.

Table 93

National Direct Student Loan as a Percent of Total Aid by Race, Institutional Type and Parental Income[1]

Student	Parental Income	Public University	Private University	Public Four-Year	Private Four-Year	Two-Year	Predominantly Black
White	<$10,000	6.3	8.8	8.4	9.0	6.1	*
	$10,000-19,999	14.3	15.4	8.6	10.4	3.1	*
	$20,000-29,999	13.8	12.2	8.3	11.7	6.0	*
	>$30,000	5.3	11.3	*	2.9	6.3	*
Black	<$10,000	7.1	16.1	9.6	10.0	4.8	5.9
	$10,000-19,999	17.7	19.3	12.3	10.8	9.0	11.1
	$20,000-29,999	7.3	12.7	*	7.6	*	9.7
	>$30,000	13.3	30.4	*	*	*	*
American Indian	<$10,000	14.3	*	4.2	2.8	*	*
	$10,000-19,999	5.4	17.4	15.2	9.9	37.3	*
	$20,000-29,999	5.2	*	*	3.4	*	*
	>$30,000	*	*	*	*	*	*
Asian-American	<$10,000	6.9	6.6	7.7	7.0	2.1	*
	$10,000-19,999	6.3	10.9	*	7.7	9.5	*
	$20,000-29,999	4.9	13.1	*	*	*	*
	>$30,000	*	*	*	*	*	*
Chicano	<$10,000	9.4	5.0	5.5	9.4	2.1	*
	$10,000-19,999	3.9	15.9	3.5	12.3	5.8	*
	$20,000-29,999	*	*	*	23.2	*	*
	>$30,000	*	*	*	*	*	*
Puerto Rican	<$10,000	*	17.9	1.4	3.8	*	*
	$10,000-19,999	15.0	10.7	*	8.5	*	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*

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[1] Data for academic year 1976-77.

* N too small to report percent.

Table 94

Federally Insured Student Loan as a Percent of Total Aid by Race, Institutional Type and Parental Income[1]

Student	Parental Income	Public University	Private University	Public Four-Year	Private Four-Year	Two-Year	Predominantly Black
White	<$10,000	3.3	4.4	6.7	5.8	4.3	*
	$10,000-19,999	5.1	8.6	8.4	10.1	4.7	*
	$20,000-29,999	8.2	9.3	23.3	12.4	24.0	*
	>$30,000	6.5	13.0	11.3	12.0	*	*
Black	<$10,000	1.1	16.2	2.0	2.4	1.4	1.1
	$10,000-19,999	3.4	4.3	8.7	4.0	5.3	5.1
	$20,000-29,999	5.8	10.9	*	8.2	*	5.7
	>$30,000	*	*	*	*	*	6.6
American Indian	<$10,000	1.3	*	6.0	15.1	7.1	*
	$10,000-19,999	8.5	14.0	*	12.6	*	*
	$20,000-29,999	*	*	*	4.9	30.4	*
	>$30,000	*	*	*	*	*	*
Asian-American	<$10,000	*	3.9	*	2.3	1.8	*
	$10,000-19,999	1.4	4.3	11.7	6.9	*	*
	$20,000-29,999	*	16.4	18.7	57.1	5.0	*
	>$30,000	*	*	*	39.3	*	*
Chicano	<$10,000	1.1	1.9	*	1.1	*	*
	$10,000-19,999	*	19.1	*	3.4	*	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*
Puerto Rican	<$10,000	*	*	1.0	*	*	*
	$10,000-19,999	7.7	6.3	*	*	*	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*

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[1] Data for academic year 1976-77.

* N too small to report percent.

Table 95

State Grant as a Percent of Total Aid by Race, Institutional Type and Parental Income[1]

Student	Parental Income	Public University	Private University	Public Four-Year	Private Four-Year	Two-Year	Predominantly Black
White	<$10,000	10.4	22.9	10.7	15.6	11.5	*
	$10,000-19,999	12.2	24.5	14.8	14.1	27.1	*
	$20,000-29,999	8.5	18.4	12.8	5.3	16.7	*
	>$30,000	9.1	31.2	13.7	9.1	12.0	*
Black	<$10,000	7.5	13.7	1.4	14.7	4.7	5.0
	$10,000-19,999	10.8	14.3	10.1	8.2	2.3	65.8
	$20,000-29,999	5.0	19.7	*	12.1	21.5	7.3
	>$30,000	*	5.9	*	*	*	*
American Indian	<$10,000	13.5	12.4	39.0	6.8	8.0	*
	$10,000-19,999	14.4	7.2	21.2	8.8	*	*
	$20,000-29,999	*	*	*	*	28.3	*
	>$30,000	*	*	*	*	*	*
Asian-American	<$10,000	30.2	16.0	*	29.9	3.6	*
	$10,000-19,999	36.0	13.6	35.7	35.4	24.4	*
	$20,000-29,999	21.4	9.0	24.0	*	9.2	*
	>$30,000	*	*	10.8	*	*	*
Chicano	<$10,000	13.2	26.8	5.6	31.0	8.8	*
	$10,000-19,999	18.4	26.6	8.7	42.6	10.4	*
	$20,000-29,999	*	*	*	21.5	*	*
	>$30,000	*	*	*	*	*	*
Puerto Rican	<$10,000	42.4	15.5	2.8	3.2	6.1	*
	$10,000-19,999	8.4	13.0	9.5	11.2	*	*
	$20,000-29,999	26.0	*	*	*	*	*
	>$30,000	*	*	*	*	*	*

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[1] Data for academic year 1976-77.
* N too small to report percent.

Table 96

Local/Private Grant as a Percent of Total Aid by Race, Institutional Type and Parental Income[1]

Student	Parental Income	Public University	Private University	Public Four-Year	Private Four-Year	Two-Year	Predominantly Black
White	<$10,000	6.2	9.1	2.7	11.2	3.5	*
	$10,000-19,999	11.5	17.2	4.8	18.7	8.3	*
	$20,000-29,999	12.0	12.3	5.3	28.5	5.1	*
	>$30,000	22.4	7.9	20.1	16.1	12.7	*
Black	<$10,000	3.0	10.6	1.3	5.9	1.0	2.0
	$10,000-19,999	6.7	21.5	4.9	16.8	1.5	5.9
	$20,000-29,999	10.2	27.3	*	25.4	*	15.3
	>$30,000	12.7	32.7	*	29.7	*	9.3
American Indian	<$10,000	1.3	20.9	*	12.4	21.6	*
	$10,000-19,999	5.4	10.9	5.4	25.9	*	*
	$20,000-29,999	*	*	*	37.7	*	*
	>$30,000	*	*	*	*	16.2	*
Asian-American	<$10,000	2.7	22.1	1.9	19.4	*	*
	$10,000-19,999	8.0	22.6	8.2	11.7	*	*
	$20,000-29,999	24.4	31.2	*	40.4	*	*
	>$30,000	*	*	23.2	36.1	*	*
Chicano	<$10,000	9.4	4.1	*	1.3	2.8	*
	$10,000-19,999	13.1	9.8	9.8	8.9	8.3	*
	$20,000-29,999	*	8.8	*	14.9	*	*
	>$30,000	*	*	*	*	*	*
Puerto Rican	<$10,000	*	7.8	5.1	*	*	*
	$10,000-19,999	*	28.7	*	5.4	*	*
	$20,000-29,999	*	*	*	*	*	*
	>$30,000	*	*	*	*	*	*

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[1] Data for academic year 1976-77.

* N too small to report percent.

Table 97

Average Amount of Aid Received by Ethnic Group, Institutional Type and College GPA for Low Income Students[1]

Ethnic Group	GPA	Public University	Private University	Public Four-Year	Private Four-Year	Two-Year	Predominantly Black
White	A to B	$95.57	$453.20	$63.28	$233.67	$77.95	*
	B- to C	46.16	224.81	55.56	164.03	38.56	*
Black	A to B	135.61	461.50	79.42	144.70	30.83	80.62
	B- to C	48.35	482.49	39.32	296.77	10.34	20.15
American Indian	A to B	*	*	*	603.66	167.50	*
	B- to C	31.39	*	*	629.96	80.48	*
Asian American	A to B	113.94	801.49	61.73	1103.65	1.00	*
	B- to C	15.74	281.20	*	*	1.00	*
Chicano	A to B	400.32	158.09	75.15	1.00	22.19	*
	B- to C	72.53	243.97	*	90.85	63.87	*
Puerto Rican	A to B	*	*	299.51	*	*	*
	B- to C	*	562.66	23.89	*	*	*

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[1] Data for academic year 1976-77.

* N too small to report percent.

CHAPTER 6

PERSISTENCE AND WITHDRAWAL AMONG WHITE STUDENTS

This chapter compares the characteristics of students who persist throughout the first two years of college with those who withdraw in four groups of white students: students whose parents' income is less than $10,000; students whose parents' income is above $10,000; women; and men.

The follow-up sample was drawn to survey two groups of white students on the basis of parental income, in order to examine the differential effects of financial aid on students from different socioeconomic backgrounds. It included 10,089 students whose parents' income was less than $10,000 and another 10,000 students whose parental income was over $10,000.[1]

Each survey respondent was classified either as a full-time persister, erratic persister, stopout, or withdrawal. Table 98 lists the proportion of students under each persistence category. The analyses in this chapter and the next one are based on two of these criterion groups, persisters and withdrawals.[2]

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[1] Less than 25% of all entering first-time, full-time freshmen have parents whose income is under $10,000.

Both groups of white students were examined with respect to these two criteria, persistence and withdrawal, using 38 independent and three interaction variables. In order to identify the significant predictors of persistence, in the first phase of the analysis the independent variables were entered in sequence, starting with the students' personal and background characteristics, followed by the environmental and institutional variables, and then the financial variables (see the sets of variables and their actual scoring in appendix E). The second phase of analysis examined mostly variables studied in the 1977 follow-up questionnaire on the student's perception of his/her financial situation, attitudes towards work, and college experiences. These variables were entered after the financial ones, and they are not considered perfect predictors of persistence since students who had dropped out of college might well reinterpret their college experience in light of that fact.

The control variables were chosen because of their hypothesized relationship to student persistence and withdrawal from college. Past research on college attrition has repeatedly shown the importance of certain personal variables and institutional characteristics. For example, high school grades, aptitude test scores, parents' education, and religious background all influence **attrition** (Astin, 1975; Pantages and Creedon, 1978; Peng and Fetters, 1978; Kohen, Nestel and Karmas, 1978). So in order to assess the independent impact of financial aid, it is important to control for these factors. Furthermore, certain institutional characteristics such as type (two-year, four-year or university, for example), selectivity, and size have been found to affect persistence. Thus both the personal background and environmental variables were entered before the financial variables.

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[2] If a student had persisted full-time, he or she was scored 2 and all others (erratic, stopouts, and withdrawals) 1. For the second criterion, withdrawal, the student who had withdrawn was scored 2 and all others 1.

The 38 independent variables included 19 personal and background variables, seven institutional characteristics, four living and work arrangement variables, and eight financial variables.

Low Income Students

Tables 99 and 100 list the significant predictors for low income students who persisted full-time and those who withdrew from school before the fall, 1977 follow-up study -- two years after they entered. Examining the variables that entered the two equations, one for persistence and the other for withdrawal, one sees certain variables that appear to be predictors of each outcome. It is not surprising that the personal variables which entered the equation are very similar to those that have been identified in previous studies. For example, a student's high school achievement as reflected in high school grades and SAT scores predicts whether he or she is going to persist or withdraw. Furthermore, the student's type of high school preparation--

specifically, whether he or she had been in a college preparatory program--also predicts whether or not the student will persist in college.

Not surprisingly, students with no religious affiliation persist less than those who have such affiliations, all other things being equal. Lack of religious ties may be symptomatic of alienation from most traditional institutions, or possibly students who grow up without religious ties develop patterns of behavior that hinder persistence in college. Perhaps the absence of religious ties that keeps students from persisting in college also keeps them from viewing college as an important institution that can help them prepare for adult roles.

Three socio-economic variables were permitted to enter the equation: father's education, mother's education, and parental income. The only one that was predictive was father's education. Perhaps educated fathers have more regard for a college education than less educated ones, and their children acquire this value and thus tend to persist to graduation, or perhaps educated fathers provide especially strong psychological support for their children attending college.

Two other important variables are the student's degree plans and his/her other expectations when entering college. For example, students who expect to get the B.A. or aspire to advanced degrees tend to persist in college, and those who expect to drop out permanently often do. Also, students who expect to get married while in college or to have an off-campus job are much more likely than others to withdraw.

With respect to institutional characteristics, students attending universities and four-year colleges are much more likely to persist than students attending two-year institutions, and students attending private colleges are much more likely to persist than those in public institutions. It appears that the academic and social atmosphere of these institutional environments influences a students' decision whether to stay in college or not.

It is clear that the number of hours a student works is an important determinant of his or her remaining in college. Students who work 21 or more hours per week are less likely than others to persist for two years. Conceivably, more of these students might persist if they could get financial aid which could enable them to work fewer hours. But this assumption remains untested. An examination of the zero-order correlations between hours of employment and other variables suggests that some students get jobs not necessarily because they have no other sources of income but because work provides them with rewards that college cannot. Perhaps, then, students who work many hours a week at off-campus jobs are not so much forced to drop out of college by the demands of their jobs as they are lured away by what they perceive as the greater rewards of working.

In this study the financial variables were the policy variables; they included the amount of aid a student received and whether he or she received aid from one source or more than one. Only two of these financial variables entered the analysis. Students who had large loans and those who had a loan and work-study "package" were both more likely than others to withdraw. Apparently, owing large amounts of money puts great financial pressure on students from low income families causing them to drop out. Furthermore, students who begin college worried about whether they can afford it are also inclined to withdraw. On the other hand, students who are given financial aid pegged to college costs are more likely than others to graduate.

So it appears that in addition to the student's aptitude, achievement, expectations and motivation, there are other variables that influence his or her chances of remaining in college. Institutional environments are important influences. It is important that we examine closely why students at universities and four-year colleges persist much more than those at two-year schools. Some researchers have concluded that students at two-year colleges drop out so often because almost all of them are commuters and thus they cannot get very involved in campus life. While this explanation seems reasonable, we should also examine institutional characteristics such as the hours at which courses are offered, the faculty's backgrounds and their degree of institutional identification and involvement, and the kind of counseling, advising and support services available in different types of institutions. However, the present study concentrated on changes that might be made in financial aid, not other institutional characteristics. Therefore, with respect to financial aid it seems that offering needy students loans instead of grants and allowing them to work long hours at off-campus jobs are not wise.

Even though variables that were measured in 1977 (experiences while in college, attitudes, and values) may well have been affected by the student's college experience and whether s/he had persisted or withdrawn, they still provide useful information about student behavior.

One 1977 question asked students why they aspired towards a particular career, and their answers are directly related to their patterns of persistence. Students who said that they had chosen a career because it permitted them to use their academic training and those who wanted to be helpful to others were more likely than others to persist (see Tables 101 and 102). On the other hand, students who said that they intended to prepare for a career that paid well were less likely to persist.

Some other variables predicting persistence or withdrawal included rating oneself high on motivation to achieve and saying that one had been lonely or bored in college. However, as stated above, one should interpret these "after the fact" findings cautiously.

Financial constraints also induced students to drop out. For example, students who had to support their parents and those who said that their parents could not pay for their siblings' education were much more likely than others to withdraw from college.

In summary, it appears that low income students who leave college are often in financial trouble and unclear about how their education will help them get a job.

High Income Students

Tables 103 and 104 show the results of the regression analysis of persistence and withdrawal among students whose parents' income was more than $10,000 per year.[3] There are some noteworthy differences in the predictors of persistence and withdrawal between high and low income students. For example, for students whose parents earn more than $10,000 per year, such new variables as age and living and work arrangements enter the equation. Both older students and those who live neither on campus nor with their parents, but rather in some other place, such as a private home or apartment, are less likely than others to persist. And while students from low income families who worked 21 hours or more a week were less likely than others to persist, this was not true of more affluent students. Only a small proportion of these affluent students (9 percent) worked many hours, but when these students worked on campus their persistence was less likely to be affected.

Turning to institutional characteristics, we find that the selectivity of an institution influences withdrawal and that students who attend selective institutions are much more likely to withdraw than others. This finding contradicts earlier studies. For example, A. Astin (1975) found that the more selective an institution, the more likely its students were to graduate. These disparate findings may be explained by the fact that this study predicts persistence only through the first two years of college, rather than to completion of the bachelor's degree, and it examines patterns of behavior among a recent cohort of students, whereas the earlier study examined college students during the late 1960s.

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[3] About one third of all college students' parents have annual incomes of $10,000 - 15,000; another one third earn $15,000 - 25,000; the remaining one third make more than $25,000. The analyses reported here are based on a random subsample of students whose parents earn more than $10,000.

Students at large institutions are less likely to persist than those at small ones, and students attending college in the West are more likely to withdraw than those in any other region. Students who said that they were single parents or heads of household and those whose parents could not afford to pay for their siblings' education were both more likely to withdraw than others (see Tables 105 and 106). Single parents and/or heads of household not only often have financial constraints, but they are subject to emotional pressures that may cause them to drop out. Parents who are unwilling to pay for the college education of the respondents may reflect a lack of parental support or encouragement.

Finally, for these high income students, aspiring to a career because it pays well was a predictor of eventual withdrawal. Despite this finding, however, students who said they valued their college education because it led to "making more money" were more likely than others to persist.

Sex Differences in Persistence

Using the same set of predictor variables, the analyses were then repeated for men and women separately.

Men

Tables 107 and 108 show the variables that predict persistence and withdrawal for white men. In addition to the expected predictors like high school GPA and high school program, several other variables also distinguish the persisters from the withdrawals. Surprisingly, men's SAT scores did not predict whether they would persist or not, and both being Protestant and having no religious affiliation predicted withdrawal.

While older students are in general less likely to persist, married older men are more likely to persist, a finding consistent with those of previous studies, which found that married students were less likely than others to withdraw. Men who expected to seek counseling for personal problems while in college persisted less than others. Possibly these students are more anxious or depressed than other students, and colleges should consider ways to restructure their psychological counseling services to provide more help for their students and possibly help them to remain in college. Men who live off campus, but not with their parents, are more likely than others to drop out, and those who work 21 or more hours per week are also more likely to drop out, regardless of whether their jobs are on or off campus. Men receiving financial aid withdrew more than others, suggesting that financial aid, instead of relieving students of money worries, may increase their anxiety and interfere with their academic performance. So far as men's values, attitudes and experiences are concerned (see Tables 109 and 110), being a single parent and having been lonely or bored in college all increases one's chances of dropping out.

Interestingly, males who said that an important reason why they went to college was to get a general education are more likely than others to drop out. Apparently, those students who seek financial and career benefits from their college education remain more strongly motivated to persist than those who "merely" want a well-rounded education. Also, men for whom it is important to meet interesting people in college are less likely than others to persist. So if entering college students could be made to feel that college were more a place where they could deveop competencies that would be useful to their future careers and earning power, and less a place simply to meet interesting people, more of them might persist to graduation.

Women

Tables 111 and 112 show the signigicant predictors of persistence and withdrawal for white women. Interestingly, whereas men who expected to marry while in college persisted neither more nor less than one would otherwise expect, women who when they entered college expected to marry while still in school were much more likely than others to drop out.

So far as work experience is concerned, women who worked fewer than ten hours per week at jobs related to their field of study strongly tended to persist, so colleges should seriously consider providing more work experiences of this sort to their female students. As was the case with low income whites, women with "packages" of loan and work study money tended to drop out more than those without such packages. But women who received aid only in the form of grants were much more likely to persist, very likely because such grants put less strain on the student and her parents than aid which has to be repaid. It is particularly important to provide such grants to female student, because several studies have shown that for women, owing money for their college education is more of a constraint on them and their parents than is the case with men (see, for example, H. Astin, et. al., 1976).

When parents contributed money towards their daughters' college expenses -- controlling for the father's education -- their daughters were more likely than otherwise to drop out. This finding supports earlier studies which showed that parental income is a less critical variable than parental education in affecting the persistence of women in college (H. Astin et. al., 1976).

TABLE 98

SEX AND RACE DIFFERENCES IN PERSISTENCE [1]

	Full-time Persisters	Erratic Persisters	Stop-outs	With-drawals	A.A. Persisters	Unclassified
Total	58.0	10.9	4.6	17.2	3.5	5.7[2]
Sex						
Men	58.9	10.4	4.8	16.2	3.7	6.0
Women	57.0	11.5	4.4	18.5	3.3	5.4
Race						
White	59.1	10.8	4.6	16.7	3.8	5.0
Black	51.9	11.4	4.9	18.1	0.7	13.1
American Indian	60.8	8.6	3.0	25.0	0	2.6
Asian-American	57.7	17.1	4.1	11.6	2.8	6.7
Chicano	31.7	9.7	4.8	34.8	9.0	10.0
Puerto Rican	49.2	11.0	4.3	30.8	0	4.6

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[1] Students were classified with respect to the "persistence" categories using one question from the 1975 questionnaire (degree plans) and three questions from the 1977 questionnaire (attendance behavior, enrollment plans, and degree completion).

[2] 5.7% of the students did not respond to one of the questions used in creating the persister category and so are unclassified.

TABLE 99

Phase I Predictors of Full-Time Persistence among Low Income Whites (R=.343)

Variables[1]	Beta Coefficent	Zero-Order Correlation	F Ratio[2]
Institutional type: university	.26	.15	62.63
Worked 21 hours or more per week	-.10	-.15	42.99
Institutional type: 4-year college	.20	.01	42.25
Freshman expectation: get a BA	.09	.19	35.65
High school grades	.10	.19	31.95
Religion: none	-.06	-.05	17.29
Freshman expectation: get married while in college	-.06	-.05	14.43
High school program: college preparatory	.05	.11	11.42
Institutional control: private	.04	.09	7.40
SAT score	.30	.17	7.01
Degree Plans: MA	.04	.07	6.82
Freshman expectation: work at outside job	-.04	-.08	6.72
SAT score x selectivity of institution	-.40	.19	5.51
Financial aid: loan and work	-.03	-.03	4.78

Note - This analysis is based on an unweighted sample of 4213 white students whose parental income is less than $10,000.

[1] For a detailed description and scoring of variables see Appendix E.

[2] F>3.84=p<.05; F>6.64=p<.01; F>10.83=p<.001

TABLE 100

Phase I Predictors of Withdrawal from College among Low Income Whites (R=.344)

Variables	Beta Coefficent	Zero-Order Correlation	*F* Ratio
Institutional type: 4-year college	-.28	-.04	94.83
Institutional type: university	-.31	-.15	69.96
Freshman expectation: get a BA	-.10	-.20	36.79
Worked 21 or more hours per week	.07	.11	20.14
Freshman expectation: get married while in college	.06	.06	17.87
Religion: none	.05	.03	10.69
Degree plans: MA	-.04	-.07	8.27
High school grades	-.05	-.15	7.89
High school program: college preparatory	-.04	-.11	7.79
Financial aid x tuition	-.04	-.03	7.28
SAT score	-.29	-.17	6.85
Amount of loan	.04	.02	5.59
Financial aid: loan and work	.03	.03	5.29
Freshman expectation: drop out permanently	.03	.07	5.06
Father's education	-.03	-.11	4.96
SAT score x selectivity of institution	.36	-.19	4.63
Concern about financing education	.03	.05	3.81
Degree plans: Ll.B. or J.D.	-.03	-.05	3.80

TABLE 101

Phase II Predictors of Persistence among Low Income Whites (R=.408)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Work value: chance to use training	.07	.10	21.86
Self-rating: motivation to achieve	.06	.14	12.19
Contribute to support of parents	-.06	-.09	17.07
Work value: be helpful to others	.04	.09	7.93
Sex: female	-.04	-.02	6.88
Self-rating: academic ability	-.06	.08	12.38
College grades	.04	.13	6.02
Involvement in college activities	.11	.22	47.69
Distance from home to college	-.03	.04	4.74
Lonely in college	-.07	-.10	24.24
Bored in college	-.05	-.13	9.07
Classes are usually informal	-.04	-.16	4.87

Note - The multiple correlation (R) is the one reached after all significant variables from phase I and II are entered. The variables are listed in the order in which they entered. However, the Beta coefficients abd F-ratios are the one's computed in the final solution.

TABLE 102

Phase II Predictors of Withdrawal among Low Income Whites (R=.393)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Work value: chance to use training	-.09	-.09	28.00
Contribute to support of parents	.05	.08	14.34
Work value: good pay	.04	.05	6.44
Work value: be helpful to others	-.03	-.07	3.75
Sex: female	.03	.02	3.70
Parents cannot finance siblings education	.04	.06	6.49
Involvement in college activities	-.11	-.20	46.18
Worked off campus	-.04	.06	6.22
Bored in college	.05	.10	13.09
Students are under pressure to get high grades	-.06	-.19	7.71
Freshman expectation: be satisfied	.03	-.03	3.56
Region: West	.04	.02	5.99
There is little contact with teachers	-.05	-.07	6.23

TABLE 103

Phase I Predictors of Persistence among High Income Whites (R=.334)

Variables	Beta Coefficent	Zero-Order Correlation	$\underline{F}$ Ratio
Institutional type: university	.38	.14	84.15
Institutional type: 4-year college	.27	-.03	67.20
Worked 21 or more hours per week	-.10	-.15	40.96
High school grades	.11	.18	38.94
Religion: none	-.06	-.05	18.58
Freshman expectation: get a BA	.06	.16	13.63
Freshman expectation: drop out permanently	-.05	-.06	13.59
SAT score	.14	.16	11.83
Tuition and fees	-.11	.07	10.37
High school program: college preparatory	.04	.09	9.14
Worked off campus	-.05	-.13	8.93
Degree plans: Ph.D.	-.04	-.01	8.00
Age	-.04	-.06	7.81
Live off campus but not with parents	-.04	-.09	7.37
Institutional control: private	.09	.06	6.66
Region: West	-.04	-.04	6.16
Financial aid x tuition	.03	.02	5.82
Father's education	.03	.08	4.60
Size of college	-.05	.09	4.13

Note - This analysis is based on an unweighted sample of 4759 white students whose parental income is over $10,000.

TABLE 104

Phase I Predictors of Withdrawal among High Income Whites (R=.282)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional type: university	-.27	-.12	52.41
Institutional type: 4-year college	-.23	.01	46.46
SAT score	-.61	-.12	26.98
SAT x selectivity of institution	.89	-.13	24.68
Selectivity of institution	-.40	-.14	20.74
High school program: college preparatory	-.06	-.10	15.24
Freshman expectation: get a BA	-.06	-.15	13.67
High school grades	-.06	-.13	13.47
Live off campus but not with parents	.05	.09	11.05
Religion: none	.04	.03	7.47
Age	.04	.06	7.16
Freshman expectation: drop out permanently	.04	.05	6.61
Freshman expectation: make at least a B average	.03	-.04	4.78
Degree plans: Ph.D.	.03	.00	3.86

TABLE 105

Phase II Predictors of Persistence among High Income Students (R=.382)

Variables	Beta Coefficent	Zero-Order Correlation	*F* Ratio
College GPA	.08	.16	20.16
Selectivity of institution	.19	.15	4.65
Work values: chance to use training	.05	.05	10.47
Single parent/head of household	-.03	-.05	4.59
Self-rating: academic ability	-.05	.07	9.10
Involvement in college activities	.12	.20	62.44
Lonely in college	-.04	-.07	8.08
Parents not willing to help financially	-.04	-.08	9.30
Bored in college	-.04	-.11	8.52
There is a great deal of conformity among students	-.04	.00	8.35
Social activities are overemphasized	.04	.05	5.49
Sex: Female	-.03	.01	4.45

TABLE 106

Phase II Predictors of Withdrawal among High Income Students (R=.326)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	-.07	-.11	14.62
Work values: chance to use training	-.06	-.06	18.52
Sex: Female	.04	.02	8.11
Self-rating: academic ability	.04	-.05	6.43
Involvement in college activities	-.09	-.14	37.99
Work on campus	.03	.00	4.70
Aid x tuition	-.03	-.01	6.50
Received financial aid	.03	.01	4.85
Bored in college	.04	.08	7.91
Reason for going to college: make more money	-.05	-.05	14.89
Work values: good pay	.03	.03	4.79
Lonely in college	.04	.05	7.13

TABLE 107

Phase I Predictors of Persistence
among White Men
(R=.305)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional type: university	.31	.13	82.41
Institutional type: 4-year college	.26	-.01	68.46
High school grades	.14	.18	59.53
Worked 21 or more hours per week	-.07	-.14	17.85
Worked off campus	-.07	-.14	16.89
Religion: none	-.06	-.05	14.96
Selectivity of institution	-.08	.14	12.62
High school program: college preparatory	.04	.08	8.33
Freshman expectation: get a BA	.04	.13	5.72
Region: West	-.03	-.04	5.21
Degree plans: Ph.D.	-.03	-.00	4.99
Religon: Protestant	-.03	-.02	4.68
Age	-.03	-.06	4.49
Freshman expectation: seek individual counseling on personal problems	-.03	-.01	4.31
Being married x age	.03	.01	4.08
Freshman expectation: drop out permanently	-.03	-.07	4.04

Note - This analysis is based on an unweighted sample of 4001 white men.

TABLE 108

Phase I Predictors of Withdrawal among White Men (R=.287)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional type: 4-year college	-.33	-.03	95.50
Institutional type: university	-.34	-.11	65.30
High school grades	-.10	-.15	34.57
Freshman expectation: work at an outside job	.06	.09	11.94
Selectivity of institution	.07	-.14	9.26
Freshman expectation: drop out permanently	.05	.07	8.55
Live off campus but not with parents	.05	.10	8.54
High school program: college preparatory	-.04	-.09	8.02
Financial aid x tuition	-.04	-.02	6.55
Worked on campus	.04	.03	6.20
Received financial aid	.04	.04	5.85
Worked 21 hours or more per week	.04	.08	4.96
Region: Central	-.03	-.06	4.47
Degree plans: Ph.D.	.03	.00	4.36
Father's education	-.03	-.09	4.30

TABLE 109

Phase II Predictors of Persistence among White Men (R=.362)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	.10	.17	29.13
Work value: chance to use training	.07	.08	21.23
Live off campus but not with parents	-.03	-.08	3.11
Self-rating: motivation to achieve	.05	.13	7.38
Tuition and fees	-.16	.06	17.81
Institutional control: private	.11	.06	10.44
Self-rating: academic ability	.05	.08	6.60
Aid x tuition	.03	.03	4.84
Single parent/head of household	-.03	-.04	3.99
Involvement in college activities	.09	.17	26.89
Region: East	.04	-.03	3.97
Lonely in college	-.03	-.06	4.57
Parents not willing to help financially	-.04	-.08	7.25
Reason for going to college: gain a general education	-.04	-.01	6.80
Bored in college	-.03	-.10	4.42

TABLE 110

Phase II Predictors of Withdrawal
among White Men
(R=.328)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Work value: chance to use training	-.07	-.07	18.45
SAT score	-.37	-.13	9.71
SAT x selectivity of institution	.55	-.13	8.94
College GPA	-.07	-.13	15.87
Single parent/head of household	.04	.05	5.65
Involvement in college activities	-.09	-.14	27.28
Worked less than 10 hours per week	.04	.03	4.45
Bored in college	.04	.07	6.67
Reason for going to college: make more money	-.04	-.03	5.59
Reason for going to college: meet interesting people	.03	.00	4.53

TABLE 111

Phase I Predictors of Persistence among White Women

(R=.364)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional type: university	.33	.16	112.08
Institutional type: 4-year college	.24	-.01	83.14
Worked 21 hours or more per week	-.11	-.16	59.55
Freshman expectation: get a BA	.11	.21	51.83
High school grades	.09	.19	28.03
Religion: none	-.07	-.05	27.08
Freshman expectation: get married while in college	-.06	-.06	17.79
SAT score	.07	.20	12.41
High school program: college preparatory	.05	.12	12.09
Worked less than 10 hours per week	.05	.09	11.86
Selectivity of institution	-.07	.21	10.16
Institutional control: private	.05	.09	9.90
Financial aid: grant only	.03	.02	4.94
Degree Plans: MA	.03	.06	4.57

TABLE 112

Phase I Predictors of Withdrawal
Among White Women
(R=.353)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Freshman expectation: get a BA	-.12	-.23	69.24
Institutional type: university	-.29	-.16	68.44
Institutional type: 4-year college	-.24	.00	67.42
Freshman expectation: get married while in college	.06	.06	19.84
Religion: none	.06	.04	18.51
Worked 21 hours or more per week	.06	.09	16.56
High school program: college preparatory	-.05	-.13	15.52
SAT score	-.41	-.17	13.88
SAT score x selectivity of institution	.54	-.20	11.10
Degree plans: MA	-.05	-.08	10.91
Selectivity of institution.	-.23	-.21	8.06
Took SAT	-.04	-.07	7.90
High school grades	-.04	-.15	7.33
Work less than 10 hours a week	.03	.02	6.36
Work related to field of study	-.03	.01	5.80
Freshman expectation: make at least a B average	.03	-.06	4.91
Degree plans: Ll.B. or J.D.	-.03	-.05	4.68
Freshman expectation: drop out permanently	.03	.05	4.63

TABLE 113

Phase II Predictors of Persistence
among White Women
(R=.429)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Work value: chance to use training	.05	.08	13.84
Work value: be helpful to others	.04	.08	9.42
Contribute to support of parents	-.05	-.08	16.74
College GPA	.03	.13	3.82
Self-rating: academic ability	-.07	.08	16.56
Self-rating: motivation to achieve	.03	.11	3.76
Work values: good pay	-.03	-.06	3.88
Involvement in college activities	.14	.25	98.75
Distance from home to college	-.04	.03	6.84
Lonely in college	-.07	-.11	30.31
Freshman expectation: be satisfied with college	-.03	.04	5.04
Bored in college	-.05	-.13	12.88
Social activities are overemphasized	.05	.08	10.91
Parents contribute financially	-.03	.05	4.66
Parents not willing to help financially	-.03	-.07	6.99
Little contact with teachers	.06	.05	9.44
Region: Central	.03	.06	5.49

TABLE 114

Phase II Predictors of Withdrawal among White Women (R=.398)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Work value: chance to use training	-.08	-.09	27.38
Work value: good pay	.05	.07	13.86
Self-rating: motivation to achieve	-.03	-.10	4.75
Self-rating: academic ability	.05	-.07	11.18
Contribute to support of parents	.04	.07	9.50
College GPA	-.03	-.10	2.35
Work value: be helpful to others	-.02	-.06	2.58
Involvement in college activities	-.10	-.20	50.17
Worked off campus	-.04	.06	6.07
Bored in college	.05	.11	13.90
Reason for going to college: make more money	-.05	-.03	11.06
Lonely in college	.04	.08	10.49

CHAPTER 7

PERSISTENCE AND WITHDRAWAL AMONG MINORITY STUDENTS

This chapter describes the variables that predict persistence and withdrawal first among the student population as a whole and then among each of the five ethnic minority groups (Blacks, Asian-Americans, American Indians, Puerto Ricans and Chicanos). The same set of variables described in Chapter 6 and listed in Appendix E is used in the regression analysis discussed in this chapter. The analyses emphasize the 1975 input variables, particularly the financial aid variables. Any 1977 variables which entered the regression equations except for those variables describing the student's patterns of employment while in school will be discussed only briefly, because students--depending on their enrollment status at that time--may have reported them in a biased way.

All the analyses were done identically, with three exceptions: (1) race was used as an independent variable only for the analysis of the student population as a whole; (2) the five variables describing the students' collective impression of their institutional environments were used only in the analysis of the total population; and (3) the predominant race of the institution (white or black) was used only for the analysis of black students.

Four groups of variables predicted persistence for almost every group: the type of institution attended (as measured by highest degree offered, size, selectivity, and type of control); the student's past academic achievement (as measured by high school grades, SAT scores, and type of high school curriculum); the number of hours per week the student was employed while in college (as measured by three dichotomous variables--1-9 hours; 10-20 hours; and 21 hours or more); and the students' expectations when beginning college, particularly whether he or she expected to earn a B.A. or to drop out of college permanently. Variables from all four of these categories entered the regression equation with significant weights for students as a whole and for all the ethnic minority groups except Puerto Ricans. These findings are generally consistent with those of past research (A. Astin, 1975; Pantages and Creedon, 1978).

All Students

Examining the student population as a whole first, we find that in addition to the four groups of common predictors listed above, some additional background variables entered the equation for persistence (see Table 115). Reporting no religious affiliation contributed negatively to the prediction of persistence, a finding consistent with past research. However, two variables whose beta weights had signs different from those of the zero-order correlations and which contradict past research findings call for further explanation. Parental income entered with a negative weight, a surprising finding since students with high parental incomes are somewhat over-represented among full-time persisters (see Chapter 4, Table 56) and since the zero-order correlation between parental income and persistence is positive. Possibly the reason why, after type of institution, past academic achievement, number of hours employed, freshman expectations, financial aid and other background variables are controlled , students with high family incomes are less likely than others to persist full-time might be the "middle income squeeze." That is, sons and daughters of middle income parents may be less eligible than others for financial aid, making it financially difficult for them to remain in school. Or else middle income students who drop out may be responding to current labor market conditions and the widespread publicity about the declining value of a college degree, while low income students may persist because they believe that education is their only real hope for upward mobility.

The other surprising variable was being black, which predicted full-time persistence positively, although there is a small negative zero-order correlation between persistence and being black. That is, after other significant variables are controlled for, blacks are slightly more likely than whites to persist full-time in college. This finding is consistent with the results of at least one other study (Peng and Fetters, 1978), which also found that black students were less likely than whites to withdraw from college.

Several financial aid variables entered one or both regression equations. The one common predictor for both full-time persistence and withdrawal was having a package consisting of a small grant, loan and work-study. It predicted persistence negatively and withdrawal positively. In addition, having financial aid of any kind predicted withdrawal, while having a package consisting of a small grant and work-study funds negatively predicted persistence. Two other financial aid variables entered the regression equation for persistence after some of the 1977 variables. Consistent with previous research findings (A. Astin, 1975), the size of students' loans entered with a negative weight. On the other hand, packages consisting of a large grant, loan and work-study money contributed positively.

The evidence presented thus far suggests that students in general are not necessarily helped to persist by receiving any form of financial aid, and they may even be hindered. For example, students who receive loans are less likely than students in general to persist, unless the loan is relatively small compared to the scholarship or grant.

Since the factors that predicted persistence and withdrawal among white students were discussed in Chapter 6, the rest of this chapter will focus on ethnic minority students.

Blacks

Three separate analyses were done for black students: a) all blacks (Tables 119 to 122); b) blacks attending predominantly white institutions (Tables 123 to 126); and c) blacks attending predominantly black institutions (Tables 127 to 130). The second and third groups are simply subsets of the first. The four general predictors (institutional type, academic achievement, number of hours employed, freshman expectations) influence each of these groups.

Of greatest interest, however, are the particular institutional variables which reach statistical significance in predicting persistence and/or withdrawal. For both the entire student population and for white students, the most important institutional variable was the highest degree offered. However, for black students we added the predominant race of their college--black or white--as a variable. This variable proved to be the most significantly related to staying in school, with attendance at a predominantly black institution positively predicting full-time persistence (see Table 119).

In addition, when we examine the institutional variables which enter when the predominant race of the institution is controlled, we find that black students attending predominantly black institutions under private control are less likely to persist than those at public predominantly black colleges. Remember that with all other regressions, each time the institutional control variable entered, private control contributes positively to persistence and negatively to withdrawal. The most plausible explanation why private control contributes negatively to persistence of blacks in predominantly black colleges is that these colleges have recently experienced severe financial constraints. Generally, private black colleges are considerably worse off financially than public ones, so perhaps they are unable to provide the support, in terms of financial aid, academic advising and personal counseling, to help their students remain in school. Further investigation is required in this area.

Other important predictors for students in mostly black colleges are both the number of hours they are employed each week and their expectations as freshmen. So far as employment is concerned, working 10-20 hours per week contributes positively to persistence, but working more than 20 hours is a negative predictor. Withdrawal from black institutions is predicted negatively both by working fewer than 10 hours and by working 10-20 hours. Expecting to get married while in college predicts persistence negatively, while planning to work at an off-campus job is a positive predictor of withdrawal. Two financial aid variables enter the regression on persistence: amount of loan (negative) and a package consisting of a large grant, loan and work-study funds (positive). Once again, we see that large loans negatively affect persistence. No financial aid variables contributed to the prediction of withdrawal from college.

Turning now to black students attending white institutions we find that the selectivity of the school contributes positively to persistence while attending a university or a four-year college contributes negatively to withdrawal. Unlike students in black institutions, for whom age seems to make no difference, older students in white colleges are less likely than others to persist. Women, too, are less likely to persist in white institutions. Interestingly, the kinds of freshman expectations which contribute to the prediction of either persistence or withdrawal are also different from those of black students in mostly black institutions, with planning to drop out contributing negatively to persisting and expecting to seek counseling for personal problems contributing positively to it.

Fewer work variables enter than for black students in black institutions; the only significant one is working more than 20 hours per week, which negatively affects persistence.

As with students attending black institutions, we find that no financial aid variables enter the prediction for withdrawal. Turning to persistence, students in both white and black institutions who receive large loans are less likely to persist, while for students in white institutions, the more work-study funds they are awarded, the more likely they are to remain in school.

Examining the phase II variables for blacks in predominantly black institutions, we find the common predictors of persistence to be high college grades (positive), the degree of involvement in college activities (positive), and the feeling that the student's parents are unwilling to help finance his/her college education (negative). The common predictors of withdrawal are high college grades (negative), contributing to the support of one's parents (positive), and the student's amount of involvement in college activities (negative). Black students in white institutions who rated themselves high on motivation to succeed and those who indicated that meeting new and interesting people and wishing to make more money were important reasons in their decision to attend college persisted more and withdrew less than their peers. However, these particular variables seem especially susceptible to being biased by students' enrollment status, and they may very well reflect outcomes rather than predictor variables.

Asian-Americans

Tables 131 to 134 show the results of the regression analysis on full-time persistence and withdrawal among Asian-American students. Most of the variables which enter the regression equation during the first phase are consistent with those of the other groups. For Asian-Americans, it appears that the most important predictor of full-time persistence, although a negative one, is being employed more than 20 hours per week. Attending a university, attending a private college and earning good grades in high school all positively predict persistence. However, some of the other variables which enter the regression equation for Asian-Americans differentiate them from the other ethnic minorities. While the freshman marital status of other groups does not seem either to increase or diminish persistence (except for black students who attend predominantly white colleges), for Asian-Americans, being married at the time of college entry is a negative predictor of full-time persistence and also the strongest predictor of withdrawal. Obviously, Asian-American students who are married when they begin college find it especially difficult to remain students, even on a part-time basis. In addition, the expectation that they will get married while in college enters both Asian-Americans persistence and withdrawal regression equations in directions consistent with those of other groups. Feeling that there is a good or very good chance that one will marry before graduation may reflect a lack of motivation to finish college. It is difficult to explain why being married when one enters college hinders the persistence of Asian-Americans more than that of any other group. We should study men and women separately to see if one sex is affected much more than the other. At any rate, since fewer than 1 percent of Asian-American entering freshmen are married, this variable may in fact be less important than it would appear from this analysis.

Aspiring to a B.A. degree enters as a negative predictor of persistence and a positive predictor of withdrawal. Asian-American students were more likely to aspire to graduate and professional degrees than was any other group, so for them aiming at no higher degree than a bachelor's represents relatively little academic ambition. And, curiously, it appears that going to college in the midwest makes it easier for Asian-Americans to stay in school at least part-time.

Two financial aid variables enter the regressions, both in unexpected directions. Receiving all one's financial aid in the form of loans proved to be a positive predictor of persistence, while having only work-study funds was a positive predictor of withdrawal. These findings are difficult to explain, and they are based on relatively few students. Perhaps students whose only financial aid is loan money come from relatively affluent families, so that they are ineligible for other types of financial aid. In any case, Asian-Americans who receive loans have little trouble, other things being equal, remaining in college. The situation is very different for Asian-Americans who receive only work-study funds. Since those who receive work-study funds are also eligible for BEOG money, one wonders why these students are not receiving it. There are at least two plausible explanations. One is that they received poor financial aid advice from their colleges. Until recently, many two-year colleges did not seek financial aid very aggressively for their students. Since BEOG funds are limited to half the amount of a student's college costs, many students at tuition-free institutions, such as those in the California community college system, may have misinterpreted the rules, thought that BEOGs provided half one's tuition rather than half one's expenses, and so considered themselves ineligible. A second explanation is that these students were actually not in the federal work-study program but received all their financial aid in the form of campus jobs funded by the college they were attending.

In looking at the phase II variables which entered the regression equation, we find that the two common predictors are college grades and feeling bored with college. Notice that for Asian-American students, expecting to live on campus during their freshman year enters with a negative weight for persistence (this variable is a phase I predictor that does not become significant enough to enter the regression equation until the second phase). This finding is at variance both with past research and our findings for other groups. It may be that the cultural tradition of Asian-Americans is such that going away to school and thus being outside their home presents particularly difficult conflicts which impede their persistence.

Chicanos

For Chicanos, institutional variables proved to be the strongest predictors of persistence and withdrawal, with attending a private college or university positively predicting persistence and negatively predicting withdrawal. In addition, attending a large institution enters the regression equation for withdrawal with a negative weight. Variables measuring academic achievement (high school grades and SAT score, number of hours employed, and freshman expectations) each entered the regression equation for persistence in ways consistent with those of other groups. In addition, receiving all one's financial aid in the form of grants was a positive predictor of full-time persistence. This finding is particularly striking because receiving only grant aid is, in general, negatively correlated in the zero-order correlation with most of the positive predictors of full-time persistence, such as high school grades, SAT scores, institutional selectivity, private control, attending a four-year college or university, and living on campus and is positively correlated with working 20 hours or more per week. Even so, the zero-order correlation of receiving only a grant is positive with full-time persistence, and the standardized regression coefficient remains positive and actually increases after control of the other phase I variables which enter the equation. So it would appear wise to limit the type of aid offered Chicano students to various forms of grants (Tables 135 to 139).

Another interesting finding appears in the phase I regression equation of withdrawal--for Chicanos, attending college in the midwest enters with a positive weight. This result is surprising in view of the fact that in the zero-order correlation, attending college in the midwest is positively associated with full-time persistence and very strongly associated with attending a university (r = .45). One would expect that attending college in the west rather than the midwest would positively predict withdrawal since there are so many community colleges in the west. Further investigation is required here. It may be, since this variable entered only the regression equation for withdrawal and not for the one for full-time persistence, that in the midwest it is more difficult for students to attend college on a part-time basis or to re-enter college once they have stopped out. Colleges and universities in the midwest may also be particularly lacking in flexibility.

Puerto Ricans

The regression analysis for Puerto Ricans proved to be very inconsistent with that of every other group. Only one of the four main sets of predictors (academic achievement, institutional type, number of hours employed, and freshman expectations) which entered the other regression analyses entered that for the Puerto Ricans. That one was freshman expectations, where feeling that there was a good chance of getting a B.A. entered positively for full-time persistence and negatively for withdrawal, while expecting to have to work at an off-campus job entered the persistence regression equation with a negative weight and the withdrawal equation with a positive one. In view of this inconsistency and because Puerto Ricans had by far the lowest response rate and are our smallest group of students, our findings concerning them should be treated with great caution (Tables 139 to 142).

Besides freshman expectations, only two variables entered the regression equation for persistence: receiving financial aid and parental income, both of which entered with positive weights. These two variables also entered the regression equation for withdrawal with negative weights; so did having all one's aid in the form of college work-study, which was a positive predictor of withdrawal.

Among the phase II variables, two predicted both full-time persistence and withdrawal: having major expenses or debts and feeling lonely while in college, both of which were negative for persistence and positive for withdrawal. A peculiar finding is that having high grades in college enters the regression equation for persistence with a negative weight. This finding too is at variance with those for the other ethnic minorities. Further research with a larger and more representative sample of Puerto Rican college students is needed in order to identify more precisely what factors affect their staying in school and dropping out.

American Indians

The results of the regression analyses predicting full-time persistence and withdrawal for American Indians (Tables 143 to 146) are consistent with the findings for most other groups--with a few exceptions. No variable describing the student's college enters during the first phase of the regression, although two variables (size of college and four-year institution) enter the regression equation during phase II. On the other hand, attending a four-year college and attending a university prove to be the most significant predictors of withdrawal (both in a negative direction) for American Indian students.

Working at a job related to one's field of study positively predicted persistence for American Indian students, while living neither on campus nor with parents was a negative predictor. In addition, students who indicated "none" as their current religious preference were less likely than others to persist full-time in college.

The only financial aid variable which enters the equation is having an aid package consisting of a loan and college work-study; it is a negative predictor of persistence and a positive predictor of withdrawal, just as it was for white students whose parents' annual incomes were under $10,000. Once again, we see the apparently deleterious effect that loans have upon student persistence.

TABLE 115

Phase I Predictors of Full-Time Persistence among all Students (R=.339)

Variables[1]	Beta Coefficent	Zero-Order Correlation	F[2] Ratio
Institutional type: university	.34	.15	98.28
Institutional type: 4-year college	.26	-.01	83.54
Work 21 or more hours per week	-.12	-.16	59.11
High school grades	.11	.18	33.70
SAT score	.09	.15	15.35
Freshman expectation: get a BA	.06	.16	13.02
Religion: none	-.05	-.04	12.59
Financial aid: small grant and work-study	-.05	-.05	12.38
Institutional selectivity	-.08	.13	11.47
High school program: college preparatory	.05	.11	8.93
Freshman expectation: get married while in college	-.04	-.05	8.84
Freshman expectation: drop out permanently	-.04	-.06	6.80
Financial aid: small grant, loan and work-study	-.04	-.01	6.46
Race: Black	.05	-.01	6.41
Parental income	-.04	.05	4.61
Institutional size	-.04	.08	4.41

Note - This analysis is based on an unweighted sample of 4,140 students representing a random one-third sample of respondents.

[1] For a detailed description and scoring of variables, see Appendix E.

[2] $F > 3.84 = p < .05$; $F > 6.64 = p < .01$; $F > 10.83 = p < .001$.

TABLE 116

Phase I Predictors of Withdrawal among all Students (R=.304)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional type: 4-year college	-.26	-.02	77.71
Institutional type: university	-.28	-.13	69.35
Freshman expectation: get a BA	-.08	-.17	22.81
Worked 11-20 hours per week	-.06	-.02	14.67
High school grades	-.06	-.14	11.09
Race: Black	-.06	.01	10.93
Region: East	.05	.08	10.15
Worked 10 hours or less per week	-.05	-.02	7.94
Race: Indian	.04	.05	7.66
SAT score	-.07	-.13	7.55
Worked on campus	.05	.01	7.45
Freshman expectation: drop out permanently	.04	.06	6.92
Amount of aid x tuition	-.04	-.03	5.84
Freshman expectation: get married while in college	.03	.03	5.13
Have financial aid	.04	.04	5.03
Religion: none	.03	.02	4.93
High school program: college preparatory	-.03	-.10	4.70
Financial aid: small grant, loan and work-study	.03	.02	4.38

TABLE 117

Phase II Predictors of Full-Time Persistence among all Students (R=.399)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	.11	.17	35.47
Sex: female	-.04	-.03	8.44
Work values: chance to use training	.09	.10	40.40
Contribute to support of parents	-.05	-.07	13.78
Single parent/head of household	-.03	-.05	5.65
Invovlement in college activities	.10	.20	35.77
Financial aid: total amount of loan	-.04	-.01	5.09
Self-rating: academic ability	-.03	.10	3.27
Lonely in college	-.05	-.09	10.21
Bored in college	-.04	-.10	8.33
Freshman expectation: be satisifed with college	-.03	.03	4.49
Parents not willing to help financially	-.03	-.08	5.48
Social activities are overemphasized	.03	.07	4.94
Financial aid: large grant, loan and work-study	.03	.03	4.08

TABLE 118

Phase II Predictors of Withdrawal among all Students (R=.360)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Work values: chance to use training	-.12	-.11	59.29
College GPA	-.12	-.14	41.92
Sex: Female	.03	.03	4.49
Contribute to support of parents	.04	.06	7.46
Work values: good pay	.05	.03	10.67
Self-rating: academic ability	.05	-.08	7.98
Involvement in college activities	-.07	-.15	20.38
Reason for going to college: make more money	-.06	-.05	12.90
Lonely in college	.04	.06	8.68
Reason for going to college: meet new and interesting people	.03	-.01	4.49

TABLE 119

Phase I Predictors of Full-Time Persistence among all Blacks (R=.334)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
High school grades	.13	.17	48.21
Institutional type: predominantly black	.18	.10	47.24
Work 21 or more hours per week	-.10	-.13	35.73
Institution control: private	-.11	.02	13.36
SAT score	.07	.16	11.01
Degree plans: MA	.05	.06	10.43
High school program: college preparatory	.05	.11	9.48
Work on campus	.05	.06	9.02
Financial aid: total amount of loan	-.05	-.02	8.60
Freshman expectation: drop out permanently	-.05	-.08	8.49
Age	-.05	-.12	7.51
Freshman expectation: get a BA	.04	.11	6.86
Amount of tuition and fees	.09	.08	6.44
Freshman expectation: seek counseling on personal problems	.04	.03	5.98
Religion: Protestant	.04	.03	4.81
Live off campus but not with parents	-.04	-.09	4.62
Sex: Female	-.03	-.02	4.25

Note - This analysis is based on an unweighted sample of 3,514 black students.

TABLE 120

Phase I Predictors of Withdrawal among all Blacks (R=.293)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
High school grades	-.10	-.16	30.17
Institutional type: 4-year college	-.17	-.09	30.11
Institutional type: predominantly black	-.08	-.05	18.76
Work 11-20 hours per week	-.07	-.04	14.60
SAT score	-.07	-.15	14.49
Work 10 hours or less per week	-.06	-.05	12.42
Live off campus but not with parents	.06	.10	11.54
High school program: college preparatory	-.06	-.11	11.21
Institutional size	-.07	-.04	9.85
Institutional type: university	-.09	-.02	7.40
Degree plans: MA	-.04	-.06	7.14
Marriage x age	.09	.09	6.13
Age	.04	.12	5.88
Sex: Female	.04	.02	5.24
Degree of financial concern	.04	.04	4.85

TABLE 121

Phase II Predictors of Full-Time Persistence among all Blacks (R=.403)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	.09	.19	23.83
Degree plans: LL.B.	-.04	-.01	7.24
Motivation to succeed	.05	.13	8.19
Contribute to support of parents	-.06	-.09	13.51
Work value: be helpful to others	.04	.06	5.13
Have major debts or expenses	-.04	-.04	5.69
Parents not willing to help financially	-.11	-.14	53.23
Single parent/head of household	-.04	-.07	5.29
Involvement in college activities	.12	.22	47.08
Bored in college	-.04	-.08	8.07
Reason for going to college: meet new and interesting people	-.04	.02	5.41

TABLE 122

Phase II Predictors of Withdrawal among all Blacks (R=.346)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	-.08	-.17	20.38
Work values: be helpful to others	-.05	-.07	10.06
Contribute to support of parents	.06	.09	14.47
Motivation to achieve	-.04	-.12	4.06
Degree plans: LlB	.04	.01	5.18
Involvement in college activities	-.06	-.16	12.08
Reason for going to college: make more money	-.06	-.06	12.99
Reason for going to college: meet new and interesting people	.05	.01	9.49
Parents not willing to help financially	.05	.06	7.93
Bored in college	.04	.07	6.01

TABLE 123

Phase I Predictors of Full-Time Persistence among Blacks in Predominantly White Institutions (R=.344)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
High school grades	.14	.23	35.15
Work 21 hours or more per week	-.11	-.15	29.08
Age	-.08	-.16	11.80
Degree plans: MA	.06	.07	9.64
Freshman expectation: drop out permanently	-.06	-.09	8.85
Financial aid: total amount of loan	-.06	.01	6.84
Institutional selectivity	.06	.21	5.91
High school program: college preparatory	.05	.13	5.51
SAT score	.06	.21	5.29
Marital status 1975: Married	-.05	-.10	4.33
Sex: Female	-.04	-.04	4.29
Freshman expectation: seek counseling on personal problems	.04	.03	4.24
Financial aid: work-study amount	.04	.07	4.19

Note - This analysis is based on an unweighted sample of 2,116 black students attending predominantly white institutions.

TABLE 124

Phase I Predictors of Withdrawal among Blacks in Predominantly White Institutions (R=.305)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional type: 4-year college	-.17	-.08	23.12
High school grades	-.11	-.20	21.02
SAT score	-.08	-.19	11.67
Institutional type: university	-.12	-.06	11.09
High school program: college preparatory	-.07	-.14	9.20
Degree plans: MA .	-.06	-.07	8.43
Freshman expectation: get a BA	.06	.15	8.10
Age	.06	.15	7.19

TABLE 125

Phase II Predictors of Full-Time Persistence among Blacks in Predominantly White Institutions (R=.405)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Self-rating: motivation to achieve	.07	.14	10.06
Have major debts or expenses	-.07	-.05	13.21
College GPA	.04	.14	4.11
Inovlement in college activities	.14	.24	37.52
Parents not willing to help financially	-.12	-.13	34.15
Reason for going to college: to meet new and interesting people	-.06	-.01	8.32
Reason for going to college: make more money	.05	.04	6.00

TABLE 126

Phase II Predictors of Withdrawal
among Blacks in
Predominantly White Institutions
(R=.352)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Motivation to achieve	-.07	-.14	9.50
Self-rating: academic ability	-.04	-.17	3.17
Have major debts or expenses	.04	.01	4.59
Reason for going to college: make more money	-.07	-.07	12.28
Contribute to support of parents	.04	.08	3.89
Parents not willing to help financially	.06	.07	9.31
College GPA	-.04	-.13	3.17
Involvement in college activities	-.07	-.17	8.71
Reason for going to college: meet new and interescing people	.06	.02	7.56

TABLE 127

Phase I Predictors of Full-Time Persistence
among Blacks in
Predominantly Black Institutions
(R=.284)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional control: private	-.13	-.10	22.61
High school grades	.11	.15	16.61
SAT score	.11	.14	13.49
Religion: none	-.09	-.09	10.75
Worked 11-20 hours per week	.07	.06	6.55
Worked 21 hours or more per week	-.07	-.08	6.06
Took SAT	.06	.08	4.51
High school program: college preparatory	.06	.09	4.32
Freshman expectation: get married while in college	-.05	-.05	4.28
Financial aid: total amount of loan	-.05	-.06	4.20

Note - This analysis is based on an unweighted sample of 1,397 black students attending predominantly black institutions.

TABLE 128

Phase I Predictors of Withdrawal among Blacks in Predominantly Black Institutions (R=.243)

Variables	Beta Coefficent	Zero-Order Correlation	*F* Ratio
Institutional size	-.12	.09	20.65
Work 11-20 hours per week	-.11	-.07	16.57
High school grades	-.10	-.12	11.71
Live off campus but not with parents	.07	.09	7.97
SAT score	-.07	-.11	6.85
Work less than 10 hours per week	-.07	-.03	6.70
Mother's education	-.07	-.08	6.44
Degree plans: Ll.B.	.06	.05	4.77
Freshman expectation: work at an outisde job	.05	.06	4.05

TABLE 129

Phase II Predictors of Full-Time Persistence
among Blacks in
Predominantly Black Institutions
(R=.400)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	.18	.25	36.38
Contribute to support of parents	-.10	-.11	16.10
Be helpful to others	.07	.09	8.51
Parents not willing to help financially	-.11	-.13	18.83
Involvement in college activities	.10	.19	13.30
Bored in college	-.06	-.11	5.09
Degree plans: LL.B.	-.05	-.02	4.23

TABLE 130

Phase II Predictors of Withdrawal among Blacks in Predominantly Black Institutions (R=.331)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	-.18	-.22	36.16
Contribute to suppport of parents	.10	.11	16.19
Reason for going to college: be helpful to others	-.09	-.09	11.02
Involvement in college activities	-.07	-.15	7.33

TABLE 131

Phase 1 Predictors of Full-Time Persistence among Asian-Americans (R=.345)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Worked 21 or more hours per week	-.14	-.20	19.68
Institutional type: university	.15	.11	14.82
Institutional control: private	.37	.16	13.26
High school grades	.12	.18	13.15
Marital status in 1975: Married	-.09	-.12	8.43
Freshman expectation: get married while in college	-.08	-.09	6.90
Tuition and fees	-.24	.17	5.71
Financial aid: loan only	.08	.06	5.69
Freshman expectation: get a BA	-.08	-.12	5.63

Note - This analysis is based on an unweighted sample of 907 Asian American students.

TABLE 132

Phase I Predictors of Withdrawal among Asian-Americans (R=.327)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Marital status in 1975: Married	.21	.22	42.80
Financial aid: College work-study only	.09	.08	8.23
Region: Central	-.09	-.06	7.79
Degree plans: BA	.09	.10	7.71
Freshman expectation: get a BA	-.09	-.13	7.50
Religion: Protestant	-.08	-.08	5.63
Freshman expectation: get married while in college	.08	.08	5.58
Freshman expectation: drop out permanently	.07	.10	4.91
Live off campus but not with parents	.07	.12	4.19

TABLE 133

Phase II Predictors of Full-Time Persistence
among Asian-Americans
(R=.410)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	.07	.16	4.21
Bored in college	-.12	-.14	14.18
Reason for going to college: make more money	.09	.05	7.36
Involvement in college activities	.10	.17	8.26
Lived on campus	-.10	.04	7.63
Institutional type: 4-year college	.16	-.02	5.07
Self-rating: academic ability	-.07	.05	4.43
Parents not willing to help financially	-.07	-.10	4.59

TABLE 134

Phase II Predictors of Withdrawal among Asian-Americans (R=.363)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
College GPA	-.08	-.10	5.60
Work 10-20 hours per week	-.06	-.05	4.04
Contribute to support of parents	.07	.06	4.45
Bored in college	.09	.10	7.39
Dissatisfaction with various aspects of college	-.07	-.04	4.12

TABLE 135

Phase I Predictors of Full-Time Persistence among Chicanos (R=.418)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional control: private	.19	.28	22.20
High school grades	.16	.28	15.17
Freshman expectation: drop out permanently	-.13	-.17	11.74
SAT score	.13	.26	8.74
Financial aid: grant only	.09	.06	5.32
Work 21 hours or more per week	-.08	-.13	4.81
Freshman expectation: get married while in college	.08	.08	4.19

Note - This analysis is based on an unweighted sample of 608 Chicano students.

TABLE 136

Phase I Predictors of Withdrawal
among Chicanos
(R=.382)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional control: private	-.21	-.18	22.45
Institutional size	-.19	-.14	18.32
High school grades	-.16	-.27	14.07
Freshman expectation: get a BA	-.14	-.21	10.81
Region: Central	.13	.00	9.20
Freshman expectation: be satisfied with college	.09	-.02	4.99

TABLE 137

Phase II Predictors of Full-Time Persistence among Chicanos (R=.472)

Variables	Beta Coefficent	Zero-Order Correlation	*F* Ratio
Work values: chance to use training	.08	.08	5.06
Mother's education	.08	.15	4.07
Religion: Protestant	-.08	.06	4.71
Contribute to support of parents	-.08	.15	4.23
Involvement in college activities	.13	.27	9.85
Sex: Female	-.08	.06	4.25
Bored in college	-.08	.13	4.62

TABLE 138

Phase II Predictors of Withdrawal among Chicanos
(R=.417)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Work values: be helpful to others	-.13	-.12	11.34
Involvement in college activities	-.11	-.21	6.79

TABLE 139

Phase I Predictors of Full-Time Persistence among Puerto Ricans (R=.469)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Have financial aid	.25	.28	12.17
Parental income	.18	.20	6.66
Freshman expectation: get a BA	.14	.23	4.08
Freshman expectation: work at an outside job	-.13	-.17	3.76

Note - This analysis is based on an unweighted sample of 201 Puerto Rican students.

TABLE 140

Phase I Predictors of Withdrawal among Puerto Ricans (R=.503)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Have financial aid	-.25	-.27	12.45
Parental income	-.19	-.21	7.54
Financial aid: college work-study only	.17	.15	7.06
Freshman expectation: get a BA	-.16	-.25	5.65
Freshman expectation: work at an outside job	.14	.18	4.77
Work 11-20 hours per week	-.14	-.06	4.43

TABLE 141

Phase II Predictors of Full-Time Persistence among Puerto Ricans (R=.617)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Have major debts and expenses	.13	-.06	3.86
Work value: chance to use training	.16	.17	6.96
Self-rating: academic ability	.15	.18	5.28
Lonely in college	-.25	-.22	17.56
College GPA	-.14	-.05	4.72
Sex: Female	.13	.06	4.78
Parents cannot help financially	.21	.10	7.28

TABLE 142

Phase II Predictors of Withdrawal
among Puerto Ricans
(R=.589)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Contribute to support of parents	.21	.25	10.45
Have major expenses and debts	.15	.02	5.46
Lonely in college	.16	.18	7.20
Reason for going to college: to meet new and interesting people	-.13	-.12	4.48

TABLE 143

Phase I Predictors of Full-Time Persistence among American Indians (R=.405)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Work 21 hours or more per week	-.19	-.17	14.94
High school grades	.16	.21	10.53
Financial aid: loan and work-study	-.14	-.12	8.91
Live off campus but not with parents	-.13	-.15	7.86
Relatedness of work to field of study	.13	.05	6.69
Freshman expectation: get a BA	.12	.15	6.57
Freshman expectation: get married while in college	-.12	-.09	6.54
Religion: None	-.12	-.11	5.97
High school program: college preparatory	.11	.14	5.50

Note - This analysis is based on an unweighted sample of 402 American Indian students.

TABLE 144

Phase I Predictors of Withdrawal among American Indians
(R=.392)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Institutional type: 4-year college	-.29	-.13	16.06
Institutional type: university	-.26	-.09	12.43
High school grades	-15	-.25	9.81
Live off campus but not with parents	.14	.17	8.84
Freshman expectation: get a BA	-.11	-.19	5.51
Financial aid: loan and work-study	.10	.07	4.99

TABLE 145

Phase II Predictors of Full-Time Persistence among American Indians (R=.473)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Involvement in college activities	.19	.27	14.63
Degree plans: Ph.D.	-.09	-.08	4.10
Size of college	.17	.07	10.86
Institutional type: 4-year college	.13	.12	6.33

TABLE 146

Phase II Predictors of Withdrawal among American Indians (R=.417)

Variables	Beta Coefficent	Zero-Order Correlation	F Ratio
Single parent/head of household	.10	.13	4.72
Reason for going to college: to gain a general education	-.10	-.13	4.68

CHAPTER 8

SUMMARY AND IMPLICATIONS

This longitudinal study was undertaken to determine the impact of financial aid on student persistence in college. The data were obtained from students who entered college as first-time freshmen in fall 1975. A sample (N=40,525)[1] of these students was followed up in fall 1977 in order to study their progress in college and find out whether financial aid had affected their persistence. The study employed both descriptive statistics and stepwise multiple regression analyses.

This brief summary profiles the students we studied, describes students with different persistence patterns, and examines the types of financial aid students receive. Then it reports the results of regression analyses used to determine how financial aid affects student persistence.

A Profile of Students in the Sample

About 95 percent of the students were under twenty years old, and about one in eight were non-white. Puerto Rican students' parents had the lowest incomes.

Women were more likely than men to enroll in four-year colleges; men were more likely than women to enter universities and two-year schools. More men enrolled in selective and expensive institutions than did women. Almost one of three blacks entered predominantly black institutions, and three of four Chicanos enrolled in two-year colleges. More whites and blacks than others attended private colleges and universities.

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[1] The sample included 2,852 students attending proprietary institutions, but their responses were not analyzed. All descriptive analyses presented in this report were based on the weighted sample.

About one in five students who started college in 1975 were no longer enrolled by fall 1977, when our second survey was conducted. Half of those who left college had completed at least one full year. Slightly more than one-fourth of those who left school did so because they had completed their program of study.

More than half the students were employed while in college, most of them at off-campus jobs. Fewer black students worked than those of any other ethnic group, and those blacks who did work were more likely than other students to have on-campus jobs.

About two-thirds of the students expressed at least some concern about their ability to pay for college. More than 10 percent were financially responsible for their parents and about 5 percent said they were single parents or household heads. There were wide variations among ethnic groups, however. For example, almost 30 percent of the Chicanos and Puerto Ricans said they helped support their parents and siblings, as opposed to 15 percent of the blacks and fewer than 10 percent of the white students. Also, 16 percent of all blacks and Chicanos said they were heads of households or single parents, compared to only 4 percent of the whites.

One-fourth of the students said their parents could not give them any financial support. Almost all the students who applied for aid received some. In all, nearly 60 percent of all students got financial aid; about one-half received only grant money, and about two-fifths received a "package" of some kind. Black students were more likely to receive BEOG funds than those of any other ethnic group. The average financial aid received was slightly more than $1,500 for an academic year. Chicanos and Asian Americans were more likely than students of any other ethnic group to say they lacked information about financial aid.

Patterns of Persistence

Of the students whose persistence patterns we could classify, 58 percent stayed in school full-time, and 3.5 percent both aspired to and earned an A.A. but did not return for a third year. When we surveyed them two years after they entered college, 17 percent had dropped out, 11 percent exhibited erratic persistence,[2] and about 5 percent had "stopped out" but were already back in school by fall 1977.

Men were more likely than women to persist as full-time students. Chicanos and Puerto Ricans dropped out more often than did other ethnic groups. Younger students were more likely to persist than older ones; those who were 30 or older tended to become erratic persisters. Students whose colleges lacked formal grading systems were greatly over-represented among both the stopouts and those who withdrew entirely. Full-time persisters were much more likely than others to live in college dormitories, whereas those with other attendance patterns--especially the stopouts--were far more likely than others to live with their parents or relatives. Many students who dropped out said they felt bored much of the time in college and were not interested in their courses; students who stopped out, on the other hand, often said they had trouble concentrating when they studied.

Regarding students' values and attitudes, full-time persisters were more likely than dropouts to say they were attending college to prepare for graduate and professional school. Both full-time and erratic persisters were far more likely than others to say that they had chosen their long-term careers with an eye towards using their college training.

Students who ultimately dropped out were more likely than others to have expressed serious financial concerns when they entered college. Those who considered their parents unwilling to help them financially were over-represented in all persistence groups except full-time persisters. More dropouts than students in general had received financial aid, but they received less aid money than any other group since a great many of them attended low-cost public and two-year institutions. More than twice as many full-time persisters as those who withdrew from school received over $4,000 in aid during their freshman year.

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[2] An erratic persister was one who changed his/her enrollment from full-time to part-time or vice versa.

Full-time persisters were employed fewer hours per week than any other students; those who had stopped out worked the most. Full-time and erratic persisters were more satisfied with their jobs than were students who had stopped out of or quit college. Students who attended universities and private institutions were the most likely to remain in school full time; those who enrolled in two-year schools on the other hand, were quite likely to withdraw.

Both students who dropped out and those who stopped out temporarily said they wanted to reconsider their goals and interests. The second most commonly cited reason for leaving school was, among dropouts, that they were "tired of being a student," and, among stopouts, that they had "changed career plans."

Student Financial Aid

Financial aid recipients were more likely to be male, black and enrolled in private institutions. Additionally, they displayed greater concern over aid; had more major debts; had parents who could not support their education financially and were more likely to be heads of households or single parents. As one would expect, aid was more critical for students at private institution. Among the ethnic groups, blacks were the most likely and whites the least likley to apply for aid. It was shown that the more sources of financial aid consulted by students, the more likely they were to receive aid.

With the exception of blacks at private universities, white students at all institutions received less grant aid than any other ethnic group. When sex differences were investigated, it was found that white and Asian American women received less grant aid than men at virtualy all types of institutions. Additionally, Chicano men at private universities and Puerto Rican men at private four year colleges, received only one-half of their aid as grant, an exceptionally low percentage.

An investigation of specific types of aid found that most funding was reaching the students for which it was intended. However, there were some exceptions, such as BEOG and NDSL, where high income students were receiving aid which was intended for low income students. Additionally, Blacks, Chicanos and American Indians in private institutions were found to be receiving local/private grants independent of their college performance. It is unclear as yet if these institutions are applying affirmative action policy aimed at supporting minority students because of a social concern and commitment, or if they are simply "buying" students to insure governmental support for the institution.

Predictors of Persistence

To identify the significant predictors of persistence and withdrawal, each of the major subpopulations was analyzed separately. These groups were low and high income whites, white men and women, all blacks as well as blacks in predominantly black and mostly white institutions, Puerto

Ricans, American Indians, Chicanos, and Asian-Americans. Four sets of predictor variables were used: personal and background characteristics; environmental and institutional features; financial aid variables; and attitudes, values and experiences while in college.

Some variables served as predictors for all the subgroups, others for just one (see Summary Tables 147 and 148). The most common predictors included high school achievement as measured by grades and SAT scores and the student's type of high school curriculum (college preparatory or vocational).

While high degree aspirations usually predicted persistence, aspiring to a Ph.D. did not. Students' expectations when they entered college also predicted persistence; for example, students who felt they had a very good chance of earning a B.A. were much more likely than average to persist, and students who expected to drop out permanently likewise tended to do so. Expecting to marry while still in college negatively predicted persistence for women, low income whites and blacks at mostly black institutions. Expecting to work at an off-campus job while in college predicted nonpersistence for white students of both income levels.

Turning to institutional characteristics, we find that for many subgroups, attendance at a university or four-year college rather than a two-year college predicted persistence. Enrollment at a private institution also predicted persistence. Institutional size was a negative predictor of persistence, as was selectivity for white students, especially those with high family incomes. For blacks, however, institutional selectivity positively predicted persistence.

Certain work variables helped predict persistence patterns. Students who worked 21 hours or more per week and those with off-campus jobs were more likely than others to withdraw. On the other hand, women who worked ten or fewer hours per week on campus at jobs related to their field of study or expected career were more likely than others to persist. For blacks, working between eleven and twenty hours per week predicted persistence.

Living off campus but not with parents encouraged white men, American Indians, Asian Americans and blacks in black institutions all to withdraw. Attending college far from home affected women the same way.

With respect to financial aid variables, loans, especially large ones, negatively predicted staying in school. However, if the loan was part of an aid package that included a large grant, it did not have the same effect. Women with outright grants were more likely than other women to persist, as were blacks awarded college work-study money. In general, loans predicted withdrawal especially when they were large or given in combination with college work-study funds.

Students who said they went to college to get a general education or to meet interesting people were less likely than others to persist. Those who said their college education would give them an opportunity to make more money were far more likely than others to persist, although paradoxically those who greatly valued high-salaried jobs tended, more than others, to drop out.

The way that students saw their financial situation often predicted whether or not they would persist. Those who said their parents could not pay for their siblings' college education were more likely than others to withdraw. Students who said their parents could not finance their own college education, particularly Asian Americans, blacks and whites, were also more likely than others to withdraw.

Being the head of household or a single parent affected men's persistence negatively, but not women's. Whereas older students, independent of sex, were less likely than others to persist, older, married men were much more likely to persist.

An analysis of all students together revealed that after all common predictors were controlled for, being black positively predicted persistence. Furthermore, blacks in black institutions were more likely to persist than blacks in white ones. Unlike the other subgroups, though, who persisted longer in private institutions, blacks in private black colleges were less likely to persist than blacks in public black ones.

Suggestions for Improving Student Financial Aid Programs

This study's findings have important implications for students, parents, and high schools, for colleges and universities, and also for the state and federal governments.

Students, Parents and High Schools

First, it is important to increase students' access to all sources of financial aid. This study shows clearly that the more sources of information about financing college to which a student has access, the more likely he or she is actually to receive financial aid. Therefore, secondary school counselors, who are the "in house" experts on financial aid, should stay very well informed about the various types and amounts of financial aid and how to apply for it, and they should make every effort to provide this information to all college-bound students.

Second, all things being equal, students without any religious affiliation were less likely than others to persist in college; possibly those who reject the church are inclined to reject other respected institutions, such as colleges and universities. Or--and these explanations are by no means mutually contradictory--perhaps they tend to be non-conformists who find it hard to comply with college regulations, deadlines and conventions. Why students without religious affiliation drop out more than others, and whether they do so because they become alienated from their colleges, are topics which should be explored further. Perhaps these students could be offered service opportunities at institutions--in, for example, hospitals or day care centers--to ease them gradually into college and university settings.

Turning to student living arrangements now, students, parents and colleges should be aware that freshmen and sophomores who don't live with their parents or on campus but choose some other housing arrangement lessen their chances of persisting. Past research by A. Astin (1975) and Chickering (1974) showed that "living on campus" was an important predictor of persistence. The reason why our findings differ may be the recent changes in college students. Many students today choose to live in campus housing because it is modestly priced and because dormitories have recently become coeducational and eliminated many parietal rules. So today's students may not be choosing to live on campus for the reasons that students did a decade ago, resulting in different persistence outcomes for on campus living.

The further away from home women attended college, the more likely they were to drop out. It is important to study this matter further and learn which women attending far away colleges were especially vulnerable to dropping out and which ones managed to persist. Then we can advise some women to attend college, if they wish to, far from home, and to counsel others that if they do so they run a high risk of dropping out.

Colleges and Universities

Institutional size has often been identified as an important persistence variable, and the present study corroborates this finding, showing that large institutions negatively affect persistence for white higher income students. We recommend that large schools seek to attenuate their harmful effects on persistence by providing curricular and living arrangements similar to those of smaller schools; some large universities, indeed, are already experimenting with such arrangements.

Institutional selectivity negatively predicts persistence for whites, but not blacks. This finding might be unique to this study, possible because it examined persistence only during the first two years of college, not until graduation. Possibly the pressures at highly selective and competitive institutions are greater during the first two years than later, so we suggest that colleges develop means--by making appropriate curricular, advising and housing changes--to help students handle such pressures.

Turning now to how colleges and universities award aid to their students, many private institutions have recently established minimum loan amounts which every student receiving aid must accept if he or she wishes to get a full aid package. In requiring all supported students to accept loans, these colleges simply wish to make their financial aid budgets stretch as far as possible. But because many aid recipients may already owe substantial amounts of money, making all students accept loans will force some students very deeply into debt and thus make them likely to drop out of school. According to the findings of this study, financial aid officers would do well, in the interest of student retention, to consider each student individually and not require all students wanting aid to accept loans.

Students belonging to some ethnic minority groups have particularly tough problems receiving appropriate financial aid. Why, for instance, do private colleges and universities award so little grant money--as opposed to loan funds--to black and to Chicano and Puerto Rican men? Do these students simply fail to apply for grants in proportion to their numbers, or have private colleges slighted them? Obviously, giving these minority students such large proportions of their aid in loans hurts the schools--not to mention the students themselves--in the long run, because students with large loan burdens tend to drop out. Similarly, the fact that all types of institutions give smaller grants and larger loans to white and Asian-American women than to others deserves study. Are colleges and universities afraid to invest money in these women on the assumption that they will not stay until graduation, or do these women simply not apply for the same amount of grant money as men? If they don't, what can be done to help them apply for more grant support?

Also, we are concerned about private institutions' apparent penchant for awarding discretionary funds to some minority students regardless of their academic achievement. Although this may be the result of an institutional commitment to support minority students who may be marginal persisters, this practice--if, indeed, it exists--raises several important policy questions. If a student remains in school, or in a particular school, merely because funds are available for that purpose, is he or she likely to derive any benefits from doing so? These are questions which need to be answered, to ensure that continued attempts at affirmative action are based on the best interest of the students, not simply on survival for the institution.

The State and Federal Governments

We expected that more financial aid variables would predict students' persistence than was actually the case. The most plausible interpretation of this finding is that by 1975, financial aid programs were reaching a large majority of the students who needed such aid, thereby reducing the amount of variability in the sample. Earlier studies showed that financial aid was an important factor in predicting presistence because until recently many needy students failed to secure aid. However, while financial aid offices are now doing a good job of helping black students get the appropriate types and amounts of aid, there are still many ethnic minority students, particularly Chicanos and Asian Americans, who say they lack information about financial aid opportunities. Both high school counselors and college financial aid officers should devise ways to provide this information to all groups of minority students.

Policy makers should be aware that different ethnic minorities have different financial situations. For example, Chicanos not only come mostly from poor families that cannot put them through college, but the students themselves feel responsible for supporting their parents, brothers and sisters.

As stated earlier, loans, especially large loans, are the worst possible form of aid to offer low income and minority students. There are several plausible explanations why loans have such poor results. First, several plausible explanations why loans have such poor results. First, many students may suffer extreme anxiety at having to perform well academically and think about repaying their loans at the same time. And the longer they remain in college, of course, the higher their debts are likely to mount. Second, loans may encourage some insolvent students to drop out of college and spend the money on their immediately pressing needs, such as a car or a decent place to live.

Students who worked twenty-one hours or more per week were less likely than others to persist. However, it is possible that many of them worked so many hours not out of financial necessity but rather because they found their jobs psychologically rewarding and work thus pulled--rather than pushed--them out of college. We must study this matter further, find the students who worked long hours because they needed the money--not the psychological gratification--and offer them additional financial aid.

That black colleges positively affect black students' persistence is important in view of the current debate about black colleges--whether they should survive; if so, what role they should play; and whether they perhaps represent a benign form of racial segregation. Our study indicates that they should be preserved, but since private black colleges negatively affect the persistence of black students, the reasons for these unfortunate results should be discovered through research and the necessary changes made.

Our findings concerning the effect of students' work values on their college persistence call for further study. They appear to suggest that students who relate their college education to their future occupations are much more likely than others to stay in school. Perhaps we are dealing here with first generation college students who view higher education as a means to upward mobility. They want to have successful careers, and they think that staying in college will enable them to do so. Thus career guidance officers should understand how students' education and work values influence their persistence in college. Our data on how certain types of college employment affect women's persistence underscore the importance of linking education to work for most women--and many men.

Turning now from persistence to college costs, it is clear that in the 1970s the expenses of college attendance increased more rapidly than financial aid money. At the decade's end, students were using all sources of financial aid as much as--and, in the case of parents, more than--they were previously. Since this study's data were collected, the federal government has increased the amount of financial aid funds and permitted more affluent students to apply for aid. Despite these measures, however, inflation has taken its toll, and the gap between college costs and available financial aid has not been closed, especially at private institutions. As long as students can obtain less than half as much money from BEOG funds as the cost of tuition at the average private college, many of these colleges will find it difficult to attract the students they need to keep going. Much recent federal legislation has expanded students' opportunities to get loans; now Washington should consider expanding grant and work-study programs as well.

Finally, we must comment on the large number of students benefiting from programs such as BEOG and NDSL whose income appears to be far above the eligibility ceiling for such aid. It is hard to say to what extent new federal regulations have made it easier for middle income students to receive such funds and to what extent the government's new regulations merely ratify practices that existed all along.

TABLE 147

PREDICTORS OF FULL-TIME PERSISTENCE[1]

Variables-Phase I	All Students R=.339	Low Income Whites R=.343	High Income Whites R=.334	White Men R=.305	White Women R=.364	All Blacks R=.334	Blacks in Predominantly Black Institutions R=.284	Blacks in Predominantly White Institutions R=.344	Puerto Ricans R=.469	Chicanos R=.418	American Indians R=.405	Asian Americans R=.345
Personal and Background Characteristics												
Sex (female)						-		-				
Age			-	-		-		-				
High school program: college preparatory	+	+	+	+	+	+	+	+			+	
High school grades	+	+	+	+	+	+	+	+		+	+	+
Marital status								-				-
Race: Black	+											
Parental income	-								+			
Father's education			+									
Religion: Protestant				-		+						
None	-	-	-	-	-		-				-	
1975 Degree Plans												
B.A.												-
M.A.		+			+			+				
PhD			-	-								
M.D.						+						
Freshman Expectations												
Work at an outside job		-										
Get a B.A.	+	+	+	+	+	+			+		+	
Drop out permanently	-		-	-		-		-		-		
Seek counseling on personal problems				-		+		+				
Get married while in college	-	-			-		-			+	-	-

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[1] See footnotes on page 304.

TABLE 147 (Continued)

PREDICTORS OF FULL-TIME PERSISTENCE

Variables-Phase I	All Students R=.339	Low Income Whites R=.343	High Income Whites R=.334	White Men R=.305	White Women R=.364	All Blacks R=.334	Blacks in Predominantly Black Institutions R=.284	Blacks in Predominantly White Institutions R=.344	Puerto Ricans R=.469	Chicanos R=.418	American Indians R=.405	Asian Americans R=.345
SAT score	+	+	+		+		+	+		+		
1975 Marital Status x Age				+								
Institutional and Environmental Characteristics												
Size of Student Body	-		-									
Selectivity of Institution	-			-	-			+				
Control: Private		+	+		+	-	-			+		+
Type: 4-year College	+	+	+	+	+							
University	+	+	+	+	+							+
Region: West			-	-								
Tuition and Fees			-			+						-
Predominant Race of Institution: Black						+						
Residence Plans:												
On-campus						+						
Off-campus but not with parents			-			-					-	
Employment:												
Worked off campus			-	-								
Work related to field of study											+	
Hours Worked:												
Less than 10 hours					+							
11-20 hours							+					
21 or more hours	-	-	-	-	-	-	-	-		-	-	-

TABLE 147 (Continued)

PREDICTORS OF FULL-TIME PERSISTENCE

Variables-Phase I	All Students R=.339	Low Income Whites R=.343	High Income Whites R=.334	White Men R=.305	White Women R=.364	All Blacks R=.334	Blacks in Predominantly Black Institutions R=.284	Blacks in Predominantly White Institutions R=.344	Puerto Ricans R=.469	Chicanos R=.418	American Indians R=.405	Asian Americans R=.345
SAT score x institutional selectivity		-										
Financial Aid Variables												
Had financial aid									+			
Total amount of aid								-				
Total amount of loan						-	-					
Total amount of work-study								+				
Type of aid:												
Grant only					+					+		
Loan only												+
Loan and work-study		-									-	
Small grant, loan and work-study	-											
Small grant, and work study	-											
Aid x Tuition and Fees			+									

TABLE 147 (Continued)

PREDICTORS OF FULL-TIME PERSISTENCE

Variables-Phase II	All Students R=.399	Low Income Whites R=.408	High Income Whites R=.382	White Men R=.362	White Women R=.429	All Blacks R=.403	Blacks in Predominantly Black Institutions R=.400	Blacks in Predominantly White Institutions R=.405	Puerto Ricans R=.617	Chicanos R=.472	American Indians R=.473	Asian Americans R=.410
1st Phase												
College grades	+	+	+	+	+	+	+	+	-			+
Financial situation:												
Major expenses or debts						-		-				
Contribute to support of parents	-	-			-	-	-			-		
Head of household/ single parent	-		-	-		-						
Self-ratings:												
Academic ability	-	-	-	+	-				+			-
Motivation to succeed		+		+	+	+		+				
Work values for long-term career:												
Good pay					-							
Be helpful to others		+			+	+	+					
Chance to use training	+	+	+	+	+				+	+		

TABLE 147 (Continued)

PREDICTORS OF FULL-TIME PERSISTENCE

Variables-Phase II	All Students R=.399	Low Income Whites R=.408	High Income Whites R=.382	White Men R=.362	White Women R=.429	All Blacks R=.403	Blacks in Predominantly Black Institutions R=.400	Blacks in Predominantly White Institutions R=.405	Puerto Ricans R=.617	Chicanos R=.472	American Indians R=.473	Asian Americans R=.410
2nd Phase												
Financial situation:												
Parents cannot help financially									+			
Parents not willing to help finanically	-		-	-	-	-	-	-				-
Reasons for going to college:												
Make more money								+				+
Gain general education				-								
Meet new and interesting people						-		-				
College experiences:												
Felt bored	-	-	-	-	-	-	-			-		-
Felt lonely	-	-	-	-	-				-			
Involvement scale	+	+	+	+	+	+	+	+		+	+	+
College enviornment:												
Conformity among students			-									
Classes are informal		-										
Social activities are over-emphasized	+		+		+							
Little contact with teachers					+							

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[a] Only Phase I variables which entered the regression during Phase I are reported here. Phase I variables which did not enter until Phase II are not reported in this table, although they are listed in all Phase II tables in Chapters 6 and 7.

[b] The "+" and "-" signs indicate the direction of the significant beta coefficient of the predictor variables in the final solution of the regression analysis.

TABLE 148

PREDICTORS OF WITHDRAWAL

Variables-Phase I	All Students R=.304	Low Income Whites R=.344	High Income Whites R=.282	White Men R=.287	White Women R=.353	All Blacks R=.293	Blacks in Predominantly Black Institutions R=.243	Blacks in Predominantly White Institutions R=.305	Puerto Ricans R=.503	Chicanos R=.382	American Indians R=.392	Asian Americans R=.327
Personal and Background Characteristics												
Sex (female)						+						
Age			+			+		+				
High school program: college preparatory	-	-	-	-	-	-		-				
High school grades	-	-	-	-	-	-	-	-		-	-	
Marital status												+
Race: Black	-											
Indian	+											
Concern about financing education		+										
Parental income									-			
Father's education		-		-								
Mother's education							-					
Religion: Protestant												-
None	+	+	+		+							
1975 Degree Plans												
B.A.											+	
M.A.		-			-	-		-				
PhD			+	+								
Ll.B.		-			-		+					
Freshman Expectations												
Make at least a B average			+		+							
Work at an outside job				+			+		+			
Get a B.A.	-	-	-		-			+	-	-	-	-
Drop out permanently	+	+	+	+	+							+
Be satisfied with college										+		
Get married while in college	+	+			+							+

TABLE 148 (Continued)

PREDICTORS OF WITHDRAWAL

Variables-Phase I	All Students R=.339	Low Income Whites R=.343	High Income Whites R=.334	White Men R=.305	White Women R=.365	All Blacks R=.334	Blacks in Predominantly Black Institutions R=.284	Blacks in Predominantly White Institutions R=.344	Puerto Ricans R=.469	Chicanos R=.418	American Indians R=.405	Asian Americans R=.345
SAT score	-	-	-		-	-	-	-				
1975 Marital Status x Age						+						
Institutional and Environmental Characteristics												
Size of Student Body						-	-			-		
Selectivity of Institution			-	+	-							
Control: Private										-		
Type: 4-year College	-	-	-	-	-	-		-			-	
University	-	-	-	-	-	-		-			-	
Region: East	+											
Central				-						+		-
Predominant Race of Institution: Black						-						
Residence Plans:												
Off-campus but not with parents			+	+		+	+				+	+
Employment:												
Worked on campus	+			+								
Work related to field of study					-						+	
Hours Worked:												
Less than 10	-				+	-	-					
11-20	-					-	-		-			
21 or more		+		+	+							

TABLE 148 (Continued)

PREDICTORS OF WITHDRAWAL

Variables-Phase I	All Students R=.339	Low Income Whites R=.343	High Income Whites R=.334	White Men R=.305	White Women R=.365	All Blacks R=.334	Blacks in Predominantly Black Institutions R=.284	Blacks in Predominantly White Institutions R=.344	Puerto Ricans R=.469	Chicanos R=.418	American Indians R=.405	Asian American R=.345
SAT score x institutional selectivity		+	+		+							
Financial Aid Variables												
Had financial aid	+			+					-			
Total amount of loan		+										
Type of aid:												
Work-study									+			+
Loan and work-study		+									+	
Small grant, loan and work-study	+											
Aid x Tuition and Fees	-	-		-								

TABLE 148 (Continued)

PREDICTORS OF WITHDRAWAL

Variables-Phase II	All Students R=.360	Low Income Whites R=.393	High Income Whites R=.326	White Men R=.328	White Women R=.398	All Blacks R=.346	Blacks in Predominantly Black Institutions R=.331	Blacks in Predominantly White Institutions R=.352	Puerto Ricans R=.589	Chicanos R=.417	American Indians R=.417	Asian Americans R=.363
1st Phase												
College grades	-		-	-	-	-	-	-				-
Financial situation:												
Major expenses or debts								+	+			
Contribute to support of parents	+	+			+	+	+	+	+			+
Head of household/ single parent				+							+	
College financing of siblings		+										
Self-ratings:												
Academic ability	+		+		+			-				
Motivation to succeed					-	-		-				
Work values for long-term career:												
Good pay	+	+	+		+							
Be helpful to others		-			-	-	-			-		
Chance to use training	-	-	-	-	-							

TABLE 148 (Continued)

PREDICTORS OF WITHDRAWAL

Variables-Phase II	All Students R=.399	Low Income Whites R=.408	High Income Whites R=.382	White Men R=.362	White Women R=.429	All Blacks R=.403	Blacks in Predominantly Black Institutions R=.400	Blacks in Predominantly White Institutions R=.405	Puerto Ricans R=.617	Chicanos R=.472	American Indians R=.473	Asian Americans R=.410
2nd Phase												
Financial situation:												
Parents not willing to help financially						+		+				
Reasons for going to college:												
Make more money	-		-	-	-	-		-				
Gain general education											-	
Meet new and interesting people	+			+		+		+	-			
College experiences:												
Felt bored		+	+	+	+	+						+
Felt lonely	+		+		+				+			
Involvement scale	-	-	-	-	-	-	-	-		-		
Dissatisfaction with college												-
College environment:												
Pressure for high grades		-										
Little contact with teachers		-										

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APPENDIX A

SURVEY INSTRUMENTS

581474

1975 Student Information Form (CIRP)

PLEASE PRINT: YOUR NAME ______________________________
First Middle or Maiden Last

HOME STREET ADDRESS ______________________________

CITY ____________ STATE ________ ZIP CODE ________

When were you born?

☐☐	☐☐	☐☐
Month (01-12)	Day (01-31)	Year

1975 STUDENT INFORMATION FORM

DIRECTIONS

Your responses will be read by an optical mark reader. Your careful observance of these few simple rules will be most appreciated.

- Use only black lead pencil (No. 2 or less).
- Make heavy black marks that fill the circle.
- Erase cleanly any answer you wish to change.
- Make no stray markings of any kind.

EXAMPLE:

Will marks made with ball pen or fountain pen be properly read? Yes . . ○ No . . ●

Dear Student:

The information in this form is being collected as part of a continuing study of higher education conducted jointly by the American Council on Education and the University of California at Los Angeles. Your voluntary participation in this research is being solicited in order to achieve a better understanding of how students are affected by their college experiences. Detailed information on the goals and design of this research program are furnished in research reports available from the Laboratory for Research on Higher Education at UCLA. Identifying information has been requested in order to make subsequent mail follow-up studies possible. Your response will be held in the strictest professional confidence.

Sincerely,

Alexander W. Astin

Alexander W. Astin, Director
Cooperative Institutional Research Program

DO NOT MARK IN THIS AREA

MARK IN THIS AREA ONLY IF DIRECTED

MARK IN THIS AREA ONLY IF DIRECTED									GRP. CODE	
⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪
①	①	①	①	①	①	①	①	①	①	①
②	②	②	②	②	②	②	②	②	②	②
③	③	③	③	③	③	③	③	③	③	③
④	④	④	④	④	④	④	④	④	④	④
⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨

1. Your sex: Male . . ○ Female . . ○

2. Are you a veteran?
(Mark one) No . . ○ Yes . . ○

3. How old will you be on December 31 of this year? (Mark one)

16 or younger	○	21	○
17	○	22	○
18	○	23-25	○
19	○	26-29	○
20	○	30 or older	○

4. In what year did you graduate from high school? (Mark one)

1975	○	Did not graduate but passed G.E.D. test	○
1974	○		
1973	○	Never completed high school	○
1972 or earlier	○		

(Note: Please check that your pencil markings are completely darkening the circles. Do not use pen or make √'s or X's. Thank You.)

5. Was your high school program: (Mark one)
College preparatory? . . . . ○
Other? (For ex., vocational) . . . . ○

6. What was your average grade in high school? (Mark one)

A or A+ ○	B+ ○	B- ○	C ○
A- ○	B ○	C+ ○	D ○

7. How well do you feel that your high school prepared you in the following areas:

(Mark one in each row)	Very Well	Fairly Well	Poorly
Mathematical skills	○	○	○
Reading and composition	○	○	○
Foreign languages	○	○	○
Science	○	○	○
History, social sciences	○	○	○
Vocational skills	○	○	○
Musical and artistic skills	○	○	○
Study habits	○	○	○

8. Are you enrolled (or enrolling) as a:
(Mark one) Full-time student? . . . ○
Part-time student? . . . ○

9. Prior to this term, have you ever taken courses for credit at this institution?
Yes . . . ○ No . . . ○

10. Since leaving high school, have you ever taken courses at any other institution?

(Mark all that apply in each column)	For Credit	Not for Credit
No	○	○
Yes, at a junior or cmty. college	○	○
Yes, at a four-year college or university	○	○
Yes, at some other postsecondary school (For ex., technical, vocational, business)	○	○

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11. How many miles is this college from your parents' home? (Mark one)

5 or less	○	51-100	○
6-10	○	101-500	○
11-50	○	More than 500	○

12. How much financial aid are you receiving from this college for this academic year? (Write in actual dollar amounts; write "0" if none)

Grants . . . . $ ________
Loans . . . . $ ________
Work-study . . . . $ ________

13. If you are receiving financial aid from this institution, what is your understanding as to the basis on which your aid was awarded? (Mark one in each row)

	Major Reason	Minor Reason	Not a Reason
Financial need	○	○	○
Academic talent	○	○	○
Athletic talent	○	○	○
Other special talent	○	○	○

14. Is this college your: (Mark one)
First choice? . . ○ Less than second
Second choice? ○ choice? . . . . . ○

15. To how many colleges other than this one did you apply for admission this year? (Mark one)

No other	1 . . ○	3 . . ○	5 . . . . . ○
○	2 . . ○	4 . . ○	6 or more ○

Note: [illegible]

16. How many other acceptances did you receive this year? (Mark one)

None ○	1 . . ○	3 . . ○	5 . . . . . ○
	2 . . ○	4 . . ○	6 or more ○

17 a. What were the other colleges to which you applied for admission? (If you applied to more than three others, name the three that were most preferred):

b. Were you accepted for admission?

c. How much financial aid were you offered for the first year? (Write in actual dollar amounts; write "0" if none was offered)

	Name of Institution	City, State	Yes	No	Grants	Loans	Work-Study
1.			○	○	$	$	$
2.			○	○	$	$	$
3.			○	○	$	$	$

18. How much of your first year's educational expenses (room, board, tuition, and fees) do you expect to cover from each of the sources listed below?

(Mark one answer for each possible source)

	None	$1–$499	$500–$999	$1,000–$1,999	$2,000–$4,000	Over $4,000
Parental, or family aid, or gifts	○	○	○	○	○	○
Grants or Scholarships:						
Basic Educational Opportunity Grant	○	○	○	○	○	○
Supplemental Educational Opportunity Grant	○	○	○	○	○	○
College Work-Study grant	○	○	○	○	○	○
State scholarship or grant	○	○	○	○	○	○
Local or private scholarship or grant	○	○	○	○	○	○
Loans:						
Fed. guaranteed student loan	○	○	○	○	○	○
Nat'l direct student loan	○	○	○	○	○	○
Other loan	○	○	○	○	○	○
Full-time work	○	○	○	○	○	○
Part-time or summer work (other than above)	○	○	○	○	○	○
Savings	○	○	○	○	○	○
Spouse	○	○	○	○	○	○
Your G.I. benefits	○	○	○	○	○	○
Your parent's G.I. benefits	○	○	○	○	○	○
Social secur. dependent's benefits	○	○	○	○	○	○
Other	○	○	○	○	○	○

19. What was your total income last year independent of your parents? Consider annual income from all sources before taxes. (Mark one)

None	○	$2,000–$2,999	○
Less than $500	○	$3,000–$4,999	○
$500–$999	○	$5,000–$9,999	○
$1,000–$1,999	○	$10,000 or more	○

20. Are you financially independent of your parents this year? Were you financially independent last year?

	Yes	No		Yes	No
This year	○	○	Last year	○	○

21. Are you: (Mark one)

- Not presently married ○
- Married, living with spouse ○
- Married, not living with spouse ○

22. Have you taken any of the following tests?

(Mark one for each)	Yes	No	Don't Remember
SAT	○	○	○
ACT	○	○	○
PSAT (11th grade)	○	○	○

23. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here?

(Mark one answer for each possible reason)

Ⓝ Not Important
Ⓢ Somewhat Important
Ⓥ Very Important

My relatives wanted me to come here	Ⓥ	Ⓢ	Ⓝ
I wanted to live away from home	Ⓥ	Ⓢ	Ⓝ
My teacher advised me	Ⓥ	Ⓢ	Ⓝ
This college has a very good academic reputation	Ⓥ	Ⓢ	Ⓝ
I was offered financial assistance	Ⓥ	Ⓢ	Ⓝ
Someone who had been here before advised me to go	Ⓥ	Ⓢ	Ⓝ
This college offers special educational programs	Ⓥ	Ⓢ	Ⓝ
This college has low tuition	Ⓥ	Ⓢ	Ⓝ
My guidance counselor advised me	Ⓥ	Ⓢ	Ⓝ
I wanted to live at home	Ⓥ	Ⓢ	Ⓝ
I could not get a job	Ⓥ	Ⓢ	Ⓝ
A friend suggested attending	Ⓥ	Ⓢ	Ⓝ
A college representative recruited me	Ⓥ	Ⓢ	Ⓝ
It will help me get a better job	Ⓥ	Ⓢ	Ⓝ

24. What is the highest academic degree that you intend to obtain?

(Mark one in each column) ▸	Highest Planned	Highest Planned at this college
None	○	○
Associate (A.A. or equivalent)	○	○
Bachelor's degree (B.A., B.S., etc.)	○	○
Master's degree (M.A., M.S., etc.)	○	○
Ph.D. or Ed.D.	○	○
M.D., D.O., D.D.S., or D.V.M.	○	○
LL.B. or J.D. (Law)	○	○
B.D. or M.Div. (Divinity)	○	○
Other	○	○

25. Where do you plan to live during the fall term? If you had a choice, where would you have preferred to live?

(Mark one in each column) ▸	Plan To Live	Prefer To Live
With parents or relatives	○	○
Other private home, apt. or rm.	○	○
College dormitory	○	○
Fraternity or sorority house	○	○
Other campus student housing	○	○
Other	○	○

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26. Are you: (Mark all that apply)

- White/Caucasian ○
- Black/Negro/Afro-American ○
- American Indian ○
- Oriental ○
- Mexican-American/Chicano ○
- Puerto Rican-American ○
- Other ○

27. Do you have any concern about your ability to finance your college education? (Mark one)

- None (I am confident that I will have sufficient funds) ○
- Some concern (but I will probably have enough funds) ○
- Major concern (not sure I will have enough funds to complete college) ○

28. How would you characterize your political views? (Mark one)

- Far left ○
- Liberal ○
- Middle-of-the-road ○
- Conservative ○
- Far right ○

29. What is your best estimate of your parents' total income last year? Consider annual income from all sources before taxes. (Mark one)

Less than $3,000	○	$15,000–19,999	○
$3,000–3,999	○	$20,000–24,999	○
$4,000–5,999	○	$25,000–29,999	○
$6,000–7,999	○	$30,000–34,999	○
$8,000–9,999	○	$35,000–39,999	○
$10,000–12,499	○	$40,000–49,999	○
$12,500–14,999	○	$50,000 or more	○

30. What is the highest level of formal education obtained by your parents?

(Mark one in each column)	Father	Mother
Grammar school or less	○	○
Some high school	○	○
High school graduate	○	○
Postsecondary school other than college	○	○
Some college	○	○
College degree	○	○
Some graduate school	○	○
Graduate degree	○	○

31. What is:

Ⓜ **Your mother's current occupation?**
Ⓕ **Your father's current occupation?**
Ⓨ **Your probable future occupation?**

(Mark one in each column. If your father or mother is deceased or retired, please indicate his or her last occupation.)

Accountant or auditor	Ⓨ	Ⓕ	Ⓜ
Architect or urban planner	Ⓨ	Ⓕ	Ⓜ
Artist (painting, sculpture, etc.)	Ⓨ	Ⓕ	Ⓜ
Business: banker or financier	Ⓨ	Ⓕ	Ⓜ
Business: buyer or purchasing agent	Ⓨ	Ⓕ	Ⓜ
Business: manager or administrator	Ⓨ	Ⓕ	Ⓜ
Business: owner or proprietor	Ⓨ	Ⓕ	Ⓜ
Business: public relations or advertising	Ⓨ	Ⓕ	Ⓜ
Business: sales worker	Ⓨ	Ⓕ	Ⓜ
Carpenter	Ⓨ	Ⓕ	Ⓜ
Clergy or religious worker	Ⓨ	Ⓕ	Ⓜ
Clerical worker: secretary, stenographer, typist, or bookkeeper	Ⓨ	Ⓕ	Ⓜ
Clerical worker: other	Ⓨ	Ⓕ	Ⓜ
Commercial artist, designer, decorator	Ⓨ	Ⓕ	Ⓜ
Computer programmer or analyst	Ⓨ	Ⓕ	Ⓜ
Construction craftsman, n.e.c.*	Ⓨ	Ⓕ	Ⓜ
Counselor: guidance, family or school	Ⓨ	Ⓕ	Ⓜ
Dentist (including orthodontist)	Ⓨ	Ⓕ	Ⓜ
Draftsman	Ⓨ	Ⓕ	Ⓜ
Driver: truck, taxi or bus	Ⓨ	Ⓕ	Ⓜ
Electrician	Ⓨ	Ⓕ	Ⓜ
Engineer	Ⓨ	Ⓕ	Ⓜ
Factory worker, n.e.c.*	Ⓨ	Ⓕ	Ⓜ
Farm or ranch laborer	Ⓨ	Ⓕ	Ⓜ
Farm or ranch owner or manager	Ⓨ	Ⓕ	Ⓜ
Foreman, n.e.c.*	Ⓨ	Ⓕ	Ⓜ
Forester, conservationist, fish or wildlife specialist	Ⓨ	Ⓕ	Ⓜ
Government official, administrator or politician	Ⓨ	Ⓕ	Ⓜ
Home economist or dietitian	Ⓨ	Ⓕ	Ⓜ
Homemaker (full-time)	Ⓨ	Ⓕ	Ⓜ
Lawyer or judge	Ⓨ	Ⓕ	Ⓜ
Librarian or archivist	Ⓨ	Ⓕ	Ⓜ
Laborer (unskilled or semi-skilled)	Ⓨ	Ⓕ	Ⓜ
Law enforcement officer	Ⓨ	Ⓕ	Ⓜ
Mathematician, statistician or actuary	Ⓨ	Ⓕ	Ⓜ
Mechanic, machinist or repairman	Ⓨ	Ⓕ	Ⓜ
Military (career)	Ⓨ	Ⓕ	Ⓜ
Nurse	Ⓨ	Ⓕ	Ⓜ
Optometrist	Ⓨ	Ⓕ	Ⓜ
Performing artist, musician or entertainer	Ⓨ	Ⓕ	Ⓜ
Pharmacist or pharmacologist	Ⓨ	Ⓕ	Ⓜ
Physician or surgeon	Ⓨ	Ⓕ	Ⓜ
Plumber	Ⓨ	Ⓕ	Ⓜ
Psychologist (clinician or therapist only)	Ⓨ	Ⓕ	Ⓜ
Scientific researcher	Ⓨ	Ⓕ	Ⓜ
Service worker: private household (maid, cook, etc.)	Ⓨ	Ⓕ	Ⓜ
Service worker: protective (other than law enforcement)	Ⓨ	Ⓕ	Ⓜ
Service worker: other	Ⓨ	Ⓕ	Ⓜ
Skilled tradesman, n.e.c.*	Ⓨ	Ⓕ	Ⓜ

*Not elsewhere classified

Continued in the next column

Social, welfare or recreation worker	Ⓨ	Ⓕ	Ⓜ
Teacher, professor or administrator: college, university	Ⓨ	Ⓕ	Ⓜ
Teacher or administrator: secondary	Ⓨ	Ⓕ	Ⓜ
Teacher or administrator: elementary	Ⓨ	Ⓕ	Ⓜ
Teacher or education specialist: other than above	Ⓨ	Ⓕ	Ⓜ
Technician or technologist (health)	Ⓨ	Ⓕ	Ⓜ
Technician or technologist (other)	Ⓨ	Ⓕ	Ⓜ
Therapist (physical, occupational, speech)	Ⓨ	Ⓕ	Ⓜ
Veterinarian	Ⓨ	Ⓕ	Ⓜ
Writer, journalist, interpreter	Ⓨ	Ⓕ	Ⓜ
Other occupation, n.e.c.*	Ⓨ	Ⓕ	Ⓜ
Unemployed		Ⓕ	Ⓜ
Undecided	Ⓨ		

*Not elsewhere classified

MAKE SURE YOU HAVE ANSWERED ITEM 32

32. Current religious preference:

(Mark one in each column)

	Yours	Father's	Mother's
Baptist	Ⓨ	Ⓕ	Ⓜ
Congregational (U.C.C.)	Ⓨ	Ⓕ	Ⓜ
Eastern Orthodox	Ⓨ	Ⓕ	Ⓜ
Episcopal	Ⓨ	Ⓕ	Ⓜ
Jewish	Ⓨ	Ⓕ	Ⓜ
Latter Day Saints (Mormon)	Ⓨ	Ⓕ	Ⓜ
Lutheran	Ⓨ	Ⓕ	Ⓜ
Methodist	Ⓨ	Ⓕ	Ⓜ
Muslim	Ⓨ	Ⓕ	Ⓜ
Presbyterian	Ⓨ	Ⓕ	Ⓜ
Quaker (Society of Friends)	Ⓨ	Ⓕ	Ⓜ
Roman Catholic	Ⓨ	Ⓕ	Ⓜ
Seventh Day Adventist	Ⓨ	Ⓕ	Ⓜ
Unitarian-Universalist	Ⓨ	Ⓕ	Ⓜ
Other Protestant	Ⓨ	Ⓕ	Ⓜ
Other Religion	Ⓨ	Ⓕ	Ⓜ
None	Ⓨ	Ⓕ	Ⓜ

33. Mark one in each row:

① **Disagree Strongly**
② **Disagree Somewhat**
③ **Agree Somewhat**
④ **Agree Strongly**

The Federal government is not doing enough to control environmental pollution	④	③	②	①
The Federal government is not doing enough to protect the consumer from faulty goods and services	④	③	②	①
State and Fed. governments should provide more money for private colleges and universities	④	③	②	①
The Federal government should help college students with more grants instead of loans	④	③	②	①
There is too much concern in the courts for the rights of criminals	④	③	②	①
People should not obey laws which violate their personal values	④	③	②	①
As long as they work hard, people should be paid equally regardless of ability or quality of work	④	③	②	①
The activities of married women are best confined to the home and family	④	③	②	①
A couple should live together for some time before deciding to get married	④	③	②	①
Parents should be discouraged from having large families	④	③	②	①
If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time	④	③	②	①
Women should receive the same salary and opportunities for advancement as men in comparable positions	④	③	②	①
Wealthy people should pay a larger share of taxes than they do now	④	③	②	①
Marijuana should be legalized	④	③	②	①
Large political campaign contributions from wealthy individuals should be outlawed	④	③	②	①
Realistically, an individual can do little to bring about changes in our society	④	③	②	①
Compared to most older people in their forties and fifties, young people these days are more idealistic	④	③	②	①
Young people these days understand more about sex than most older people	④	③	②	①
College officials have the right to regulate student behavior off campus	④	③	②	①
Faculty promotions should be based in part on student evaluations	④	③	②	①
College grades should be abolished	④	③	②	①
Colleges would be improved if organized sports were de-emphasized	④	③	②	①
Student publications should be cleared by college officials	④	③	②	①
College officials have the right to ban persons with extreme views from speaking on campus	④	③	②	①
Students from disadvantaged social backgrounds should be given preferential treatment in college admissions	④	③	②	①
Open admissions (admitting anyone who applies) should be adopted by all publicly supported colleges	④	③	②	①
Even if it employs open admissions, a college should use the same performance standards in awarding degrees to all students	④	③	②	①
The federal government should do more to discourage energy consumption	④	③	②	①
Students have the right to demonstrate to prohibit speakers from coming to campus	④	③	②	①

34. Below is a list of different undergraduate major fields grouped into general categories. Mark only one circle to indicate your probable field of study.

ARTS AND HUMANITIES

Art, fine and applied ○
English (language and literature) ○
History ○
Journalism ○
Language and Literature (except English) ○
Music ○
Philosophy ○
Speech and Drama ○
Theology or Religion ○
Other Arts and Humanities ○

BIOLOGICAL SCIENCE

Biology (general) ○
Biochemistry or Biophysics ○
Botany ○
Marine (Life) Science ○
Microbiology or Bacteriology ○
Zoology ○
Other Biological Science ○

BUSINESS

Accounting ○
Business Admin. (general) ○
Finance ○
Marketing ○
Management ○
Secretarial Studies ○
Other Business ○

EDUCATION

Business Education ○
Elementary Education ○
Music or Art Education ○
Physical Education or Recreation ○
Secondary Education ○
Special Education ○
Other Education ○

ENGINEERING

Aeronautical or Astronautical Eng. ○
Civil Engineering ○
Chemical Engineering ○
Electrical or Electronic Engineering ○
Industrial Engineering ○
Mechanical Engineering ○
Other Engineering ○

PHYSICAL SCIENCE

Astronomy ○
Atmospheric Science (incl. Meteorology) ○
Chemistry ○
Earth Science ○
Marine Science (incl. Oceanography) ○
Mathematics ○
Physics ○
Statistics ○
Other Physical Science ○

PROFESSIONAL

Architecture or Urban Planning ○
Home Economics ○
Health Technology (medical, dental, laboratory) ○
Library or Archival Science ○
Nursing ○
Pharmacy ○
Therapy (occupational, physical, speech) ○
Other Professional ○

SOCIAL SCIENCE

Anthropology ○
Economics ○
Geography ○
Political Science (govt., international relations) ○
Psychology ○
Social Work ○
Sociology ○
Other Social Science ○

TECHNICAL

Building Trades ○
Data Processing or Computer Programming ○
Drafting or Design ○
Electronics ○
Mechanics ○
Other Technical ○

OTHER FIELDS

Agriculture ○
Communications (radio, T.V., etc.) ○
Computer Science ○
Forestry ○
Law Enforcement ○
Military Science ○
Other Field ○
Undecided ○

35. Indicate the importance to you personally of each of the following: (Mark one for each item)

Ⓝ Not Important
Ⓢ Somewhat Important
Ⓥ Very Important
Ⓔ Essential

Becoming accomplished in one of the performing arts (acting, dancing, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming an authority in my field	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Obtaining recognition from my colleagues for contributions to my special field	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Influencing the political structure	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Influencing social values	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Raising a family	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Having administrative responsibility for the work of others	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Being very well off financially	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Helping others who are in difficulty	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Making a theoretical contribution to science	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Writing original works (poems, novels, short stories, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Creating artistic work (painting, sculpture, decorating, etc.)	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Being successful in a business of my own	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Becoming involved in programs to clean up the environment	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Developing a meaningful philosophy of life	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Participating in a community action program	Ⓔ	Ⓥ	Ⓢ	Ⓝ
Keeping up to date with political affairs	Ⓔ	Ⓥ	Ⓢ	Ⓝ

36. What is your best guess as to the chances that you will: (Mark one for each item)

Ⓝ No Chance
Ⓛ Very Little Chance
Ⓢ Some Chance
Ⓥ Very Good Chance

Change major field?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Change career choice?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Fail one or more courses?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Graduate with honors?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Be elected to a student office?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Join a social fraternity, sorority, or club?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Live in a coeducational dorm?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Live in a commune while in college?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Be elected to an academic honor society?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Make at least a "B" average?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Need extra time to complete your degree requirements?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Need tutoring in some courses	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Have to work at an outside job during college?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Seek vocational counseling?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Seek individual counseling on personal problems?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Get a bachelor's degree (B.A., B.S., etc.)?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Drop out of this college temporarily (exclude transferring)?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Drop out permanently (exclude transferring)?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Transfer to another college before graduating?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Be satisfied with your college?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Find a job after graduation in the field for which you were trained?	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Get married while in college? (skip if married)	Ⓥ	Ⓢ	Ⓛ	Ⓝ
Get married within a year after college? (skip if married)	Ⓥ	Ⓢ	Ⓛ	Ⓝ

The Laboratory for Research on Higher Education at UCLA actively encourages the colleges that participate in this survey to conduct local studies of their student bodies. If these studies involve collecting follow-up data, it is necessary for the institution to know the students' ID numbers so that follow-up data can be linked with the data from this survey. If your college asks for a tape copy of the data and signs an agreement to use it only for research purposes, do we have your permission to include your ID number in such a tape? Yes ○ No ○

37. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
38. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
39. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
40. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
41. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

The remaining circles are provided for items specifically designed by your college rather than by the Laboratory for Research on Higher Education. If your college has chosen to use the circles, observe carefully the supplemental directions given you.

THANK YOU!

42. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
43. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
44. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
45. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
46. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

Prepared by the Laboratory for Research on Higher Education, University of California, Los Angeles, California 90024 Processed by Intran Corporation, 4555 West 77th Street, Minneapolis, Minnesota 55435

Higher Education Research Institute, Inc.
924 Westwood Blvd., Suite 850
Los Angeles, California 90024
(213) 478-6556

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August, 1977

Hello,

You may remember that when you started school in the Fall of 1975 you completed a brief information form in which you indicated your educational and career plans. We are now involved in several studies of factors that affect students' progress in college. These studies will provide information that will be useful to students, schools, and state-federal governments. We would like to ask you to take some time off and complete this questionnaire and return it to us. Your responses are valuable.

All of the information is to be coded and used in group comparisons, so your responses will be protected. Since we are following a limited sample of persons, it is important to have as complete a response as possible. We hope that you will be able to participate. While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

Thank you for your help.

Cordially,

Alexander W. Astin

Alexander W. Astin
President

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01320

DIRECTIONS:

Your responses will be read by an automatic scanning device. You need to follow some simple rules.

- **Use only black lead pencil (No. 2 ½ or softer).**
- **Make heavy dark marks that completely fill the circle.**
- **Erase cleanly any answer you wish to change.**
- **Make no stray markings of any kind.**

Example: Will marks made with ball point pen or a felt tip marker be properly read?

Yes .... ○
No .... ●

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1. What was your enrollment status from September 1975 to August 1976? From September 1976 to August 1977? (Indicate full-time, part-time, or no enrollment for each month in each of the two columns.)

	1975-76			1976-77		
	Full	Part	None	Full	Part	None
September	○	○	○	○	○	○
October	○	○	○	○	○	○
November	○	○	○	○	○	○
December	○	○	○	○	○	○
January	○	○	○	○	○	○
February	○	○	○	○	○	○
March	○	○	○	○	○	○
April	○	○	○	○	○	○
May	○	○	○	○	○	○
June	○	○	○	○	○	○
July	○	○	○	○	○	○
August	○	○	○	○	○	○

2. Do you plan to enroll this fall? (Mark one.)

- ○ No
- ○ Yes, full-time
- ○ Yes, part-time
- ○ Not this fall, but within the next 2 years
- ○ Not this fall, but after 2 years
- ○ Never

If yes, indicate:

name of institution

city and state

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⓪	⓪	⓪	⓪
①	①	①	①
②	②	②	②
③	③	③	③
④	④	④	④
⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨

3. If you have left school for a time but plan to re-enroll this fall, indicate the importance of each reason: (Mark one on each line.)

	Very Important	Somewhat Important	Not Important
I interrupted my studies for financial reasons	○	○	○
I interrupted my studies for illness (personal or family)	○	○	○
I interrupted my studies for academic reasons	○	○	○
I interrupted my studies because I wanted to travel	○	○	○
I interrupted my studies because I wanted to work	○	○	○
I returned to school because it is very important for me to get my degree	○	○	○
I returned to school because my family insisted that I do	○	○	○
I returned to school because I could not get work	○	○	○
I returned to school because I did not like the job I had	○	○	○
Not applicable (I have never interrupted my studies)	○	○	○

4. Indicate (A) the highest degree or certificate you have received and (B) the highest degree you are planning to receive: (Mark one in each column.)

	A Highest Received	B Highest Planned
Vocational diploma/certificate	○	○
Associate (A.A. or equivalent)	○	○
Bachelor's (B.A., B.S., etc.)	○	○
Teaching credential	○	○
Master's (M.A., M.S., etc.)	○	○
Ph.D. or Ed.D.	○	○
M.D., D.O., D.D.S., or D.V.M.	○	○
LL.B. or J.D. (law)	○	○
B.D. or M.Div. (divinity)	○	○
High school diploma	○	○
Other	○	○

5. What was your grade average during the last two years? (Mark one.)

A or A+	○
A– or B+	○
B	○
B– or C+	○
C	○
C– or D+	○
D	○
Less than D	○
Pass/satisfactory	○
Fail/unsatisfactory	○
Not applicable/no grading system in my institution	○

6. What is your current marital status? (Mark one.)

Single	○
Married, living with spouse	○
Separated	○
Divorced	○
Widowed	○

7. Where have you lived for most of the time during each of the last two years? (Mark one in each column.)

	1975-76	1976-77
With parents or relatives (not including spouse)	○	○
With spouse	○	○
Private home, apartment, or room	○	○
College dormitory	○	○
Fraternity or sorority house	○	○
Other campus student housing	○	○
Other	○	○

8. Which of the following apply to your financial situation? (Mark all that apply.)

I have major expenses or debts (medical, educational, etc.) ○
I contribute to the support of my parent(s), or members of my parental family ○
My parents have a low income and cannot help with my college expenses ○
My parents are not willing to help pay for my college expenses ○
Head of household/single parent ○

9. Did your parents claim you as a dependent on their 1974, 1975, and/or 1976 income tax statements? (Mark one for each year.)

1974 . . . . . yes ○ . . . . . . no ○ . . . . don't know ○
1975 . . . . . yes ○ . . . . . . no ○ . . . . don't know ○
1976 . . . . . yes ○ . . . . . . no ○ . . . . don't know ○

10. Are your parents able to help finance the post-high school education of your brother(s) or sister(s)? (Mark one.)

No ○
Yes ○
Not applicable ○

11. When, during your most recent academic year, did you hear the decision on your financial aid application? (Mark one for each major source of aid.)

	Grants	Loans	Work-study
More than a month before school began	○	○	○
During the month before school began	○	○	○
When school began	○	○	○
After school began	○	○	○
Not applicable	○	○	○

12. Which of the following reasons were important in your decision to continue your education beyond high school? (Mark all that apply.)

I always expected to go to college ○
My parents or family wanted me to go to college ○
To contribute more to my community ○
To get a job ○
To make more money ○
To get a job in my chosen field ○
To obtain financial aid ○
To gain a general education and appreciation of ideas ○
To learn more about things that interest me ○
To prepare myself for graduate or professional school ○
To meet new and interesting people ○
All my friends went to college ○
There was nothing better to do ○
Could not find a job ○
I participated in special programs (Upward Bound, Talent Search, Educational Opportunity Program) ○
My teachers and counselors encouraged me to go ○

13. Which of the following apply to your experiences since entering college in fall 1975? (Mark all that apply.)

Had trouble concentrating while studying ○
Felt bored much of the time ○
Felt lonely much of the time ○
Wasn't very interested in any of my courses ○
Couldn't adjust the program of study to fit my own academic and professional interests ○
Changed major field ○
Received a lot of encouragement from my family to stay in school ○
Received a lot of encouragement from my friends to stay in school ○
Changed career choice ○
Failed one or more courses ○
Considered dropping out but didn't ○
Participated in a play or entered an art competition ○
Participated in intercollegiate or intramural sports ○
Worked on the school paper, yearbook, or literary magazine ○
Was elected to a scholastic honor society ○
Participated in student grovernment ○
Joined a social fraternity, sorority, or club ○
Participated in subject-matter or special-interest clubs (e.g., French club, radio station) ○
Participated in student religious organization ○
Was a guest in a teacher's or administrator's home ○
Called a teacher or an administrator by his or her first name ○
Studied with other students ○
Tutored another student ○
Voted in a student election ○
Sang in a choir or glee club or played in a school band/orchestra ○
Participated in organized student demonstrations ○
During the last year I had at least two courses in my chosen field of study ○
It is very important to me to complete my original degree plans ○
I was in Upward Bound, Educational Opportunity Program, or Talent Search ○
Received pressure from parents or friends to stay in school ○

14. Below is a list of various experiences with school. How satisfied have you been with each one? (Mark one on each line.)

	Satisfied	Not Satisfied	Not Applicable
Orientation for new students	○	○	○
Registration	○	○	○
Distribution of grade reports	○	○	○
Distribution of transcripts	○	○	○
Financial aid	○	○	○
Academic advisement	○	○	○
Career counseling	○	○	○
Personal counseling	○	○	○
Tutoring or remedial program	○	○	○
Child care facilities	○	○	○
Health services	○	○	○
Job placement	○	○	○
Campus security	○	○	○
On-campus housing	○	○	○
Parking service	○	○	○
Financial aid advice	○	○	○
Extracurricular activities	○	○	○
Social life (dating, parties, etc.)	○	○	○
Course work	○	○	○
Reading and study skills lab	○	○	○
Special instructional media	○	○	○
Independent study	○	○	○
Honors program	○	○	○
Cooperative work program	○	○	○
Assistance in finding housing	○	○	○
Assistance in finding part-time work	○	○	○
Ethnic studies	○	○	○
Women's studies	○	○	○

15. Answer each of the following as you think it applies to the school or training program you entered in fall 1975. (Mark one on each line.)

	Yes	No
The students are under a great deal of pressure to get high grades	○	○
There is a great deal of conformity among the students	○	○
Most of the students are very bright academically	○	○
There is keen competition among most of the students for high grades	○	○
The course work is definitely more theoretical than practical	○	○
Competitive sports are overemphasized	○	○
The classes are usually informal	○	○
Most students are treated like "numbers in a book"	○	○
Social activities are overemphasized	○	○
There is little or no contact with teachers	○	○

16. What are your college plans for fall 1977? (Mark one.)

I plan to attend the same school in which I enrolled in fall 1975 (Fill in circle and skip to Question 20) ○
I plan to attend a different school than the one I started in fall 1975 ○
I do not plan to attend school ○

17. Why did you decide to change colleges or leave college? (Mark all that apply in Column A and the one most important reason in Column B.)

	A	B
Completed my program at my first institution	○	○
Family responsibilities	○	○
I had a good job offer	○	○
Wanted a better social life	○	○
Wanted to go to a different-size school	○	○
Wanted to be farther from home	○	○
Wanted to be closer to home	○	○
Moved to a different location	○	○
Wanted to go to a school with a better academic rating	○	○
Didn't do as well academically as I thought I would	○	○
Relatives discouraged me	○	○
Decided I did not need a further degree	○	○
Wanted to reconsider my goals and interests	○	○
Changed my career plans	○	○
Tired of being a student	○	○
Dissatisfied with first school	○	○
Wanted less expensive school	○	○
My financial situation improved	○	○
Unable to get the financial aid I needed	○	○
Wanted practical experience	○	○
Heard more education would not improve my job prospects	○	○
Didn't feel safe on campus	○	○
Had no place to study	○	○
My boy/girlfriend moved	○	○
Didn't "fit in" at this school	○	○

18. If you have transferred, indicate when: (Mark one.)

During September 1975 to June 1976 ○
Fall 1976 ○
After beginning of 1976 academic year ○
Fall 1977 ○

19. If you decided to discontinue your studies, indicate when: (Mark one.)

During September 1975 to June 1976 ○
Fall 1976 ○
After beginning of 1976 academic year ○

20. **How do you rate yourself on each of the following traits, compared with the average person of your age? Give your most accurate estimate of yourself.** (Mark one on each line.)

	Above Average	Average	Below Average
Academic ability	○	○	○
Motivation to achieve	○	○	○
Leadership ability	○	○	○
Mathematical ability	○	○	○
Mechanical ability	○	○	○
Originality	○	○	○
Popularity	○	○	○
Popularity with the opposite sex	○	○	○
Self-confidence (social)	○	○	○
Self-confidence (intellectual)	○	○	○
Understanding of others	○	○	○
Writing ability	○	○	○
Artistic ability	○	○	○
Public speaking ability	○	○	○
Athletic ability	○	○	○
Physical attractiveness	○	○	○
Determination	○	○	○

Below is a set of questions about college costs, how you paid for college, and financial aid. Please answer them as well as you can.

COSTS

21. **What were your costs during your last two years in school?** (Mark one for each item in each column.)

	1975-76						1976-77					
	None	$1–499	$500–999	$1,000–1,999	$2,000–4,000	Over $4,000	None	$1–499	$500–999	$1,000–1,999	$2,000–4,000	Over $4,000
Total costs	○	○	○	○	○	○	○	○	○	○	○	○
Tuition and fees	○	○	○	○	○	○	○	○	○	○	○	○
Books and supplies	○	○	○	○	○	○	○	○	○	○	○	○
Food	○	○	○	○	○	○	○	○	○	○	○	○
Housing or room	○	○	○	○	○	○	○	○	○	○	○	○
Commuting expenses (including travel to and from school and visiting family)	○	○	○	○	○	○	○	○	○	○	○	○
Medical and dental expenses	○	○	○	○	○	○	○	○	○	○	○	○
Miscellaneous personal expenses (grooming, recreation, laundry, etc.)	○	○	○	○	○	○	○	○	○	○	○	○
Not in school	○						○					

FINANCING EDUCATION

22. **Indicate the funding source(s) and the amount of money you received from each for your college expenses during the last two years.** (Mark all that apply for each year.)

	1975-76						1976-77					
	None	$1–499	$500–999	$1,000–1,999	$2,000–4,000	Over $4,000	None	$1–499	$500–999	$1,000–1,999	$2,000–4,000	Over $4,000
Tuition waiver	○	○	○	○	○	○	○	○	○	○	○	○
Parental, family aid or gifts	○	○	○	○	○	○	○	○	○	○	○	○
Grants or scholarships:												
Basic Educational Opportunity Grant (BEOG)	○	○	○	○	○	○	○	○	○	○	○	○
Supplemental Educational Opportunity Grant (SEOG)	○	○	○	○	○	○	○	○	○	○	○	○
State scholarship or grant	○	○	○	○	○	○	○	○	○	○	○	○
State Scholarship Incentive Grant (SSIG)	○	○	○	○	○	○	○	○	○	○	○	○
Local or private scholarship or grant	○	○	○	○	○	○	○	○	○	○	○	○
Vocational grant	○	○	○	○	○	○	○	○	○	○	○	○
Bureau of Indian Affairs Grant (BIA)	○	○	○	○	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○	○	○	○	○
Loans:												
Federally Guaranteed Student Loans (FISL or GSLP)	○	○	○	○	○	○	○	○	○	○	○	○
National Direct Student Loan (NDSL)	○	○	○	○	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○	○	○	○	○
Work:												
College work-study	○	○	○	○	○	○	○	○	○	○	○	○
Full-time work	○	○	○	○	○	○	○	○	○	○	○	○
Part-time or summer work	○	○	○	○	○	○	○	○	○	○	○	○
Savings	○	○	○	○	○	○	○	○	○	○	○	○
Spouse's income	○	○	○	○	○	○	○	○	○	○	○	○
G.I. benefits (including Veterans Dependents Benefits)	○	○	○	○	○	○	○	○	○	○	○	○
ROTC scholarship or stipend	○	○	○	○	○	○	○	○	○	○	○	○
Social Security Dependents Benefits	○	○	○	○	○	○	○	○	○	○	○	○
Aid for Families with Dependent Children (AFDC)	○	○	○	○	○	○	○	○	○	○	○	○
Food Stamps	○	○	○	○	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○	○	○	○	○

FINANCIAL AID

23. How much total aid, other than parental contribution, have you received during the last two years? (Mark one for each item in each column.)

	1975-76						1976-77					
	None	$1–499	$500–999	$1,000–1,999	$2,000–4,000	Over $4,000	None	$1–499	$500–999	$1,000–1,999	$2,000–4,000	Over $4,000
Tuition waiver	○	○	○	○	○	○	○	○	○	○	○	○
Grants	○	○	○	○	○	○	○	○	○	○	○	○
Loans	○	○	○	○	○	○	○	○	○	○	○	○
Work-study	○	○	○	○	○	○	○	○	○	○	○	○

24. Which of the following sources was helpful to you in learning about ways to pay for your education after high school? (Mark all that apply.)

High school or college coaches ○
High school counselor ○
High school teacher ○
College admissions officer ○
College financial aid office staff ○
College teacher or adviser ○
College financial aid literature ○
Public advertising (radio, T.V., posters) ○
Friends or other students ○
Family ○
Veteran's Administration office ○
Special services for disadvantaged students ○
Veteran's cost of instructional programs; Office of Veteran's Affairs ○
Special programs (Upward Bound, Talent Search, Educational Opportunity Program) ○

25. When you first applied for financial aid, how easy or difficult was the application procedure? (Mark one.)

Very easy ○
Somewhat easy ○
Average ○
Somewhat difficult ○
Very difficult ○
Not applicable ○

26. Which of the following statements apply to your experience with financial aid? (Mark all that apply.)

I lost my aid because I dropped out of school ○
Parents didn't want to complete financial statement ○
I didn't think I was eligible for financial aid ○
My grades were too low to receive financial aid ○
My income status was too high to receive financial aid ○
Financial aid enabled me to attend school ○
Could not get aid because I enrolled part time ○
I consider myself financially independent of my parents ○
I did not apply for financial aid in time ○
I did not apply for financial aid ○
Financial aid application forms and procedures were too long or complicated for me to complete ○
My experiences with financial aid have generally been favorable ○
Didn't know about financial aid options ○
I was turned down for financial aid ○
Couldn't get type of aid I wanted ○
Didn't want to get further into debt ○
Different type of aid would have been better for me ○
Parents did not want to pay any more for my education ○
My experience with financial aid has been generally unfavorable ○

27. Indicate (A) the total amount of loans you have obtained thus far to finance your education, and (B) the absolute maximum amount of educational debt you are willing to incur for your college (undergraduate) education. (Mark one in each column.)

	A Thus Far	B Absolute Maximum
None	○	○
Less than $500	○	○
$500–999	○	○
$1,000–1,999	○	○
$2,000–3,999	○	○
$4,000–5,999	○	○
$6,000–7,999	○	○
$8,000–9,999	○	○
$10,000 or more	○	○

28. How important are the following in your choice of a long-term career? (Mark one on each line.)

	Very Important	Somewhat Important	Not Important
Job openings are generally available	○	○	○
Rapid career advancement is possible	○	○	○
Good pay	○	○	○
It's a well-respected or prestigious occupation	○	○	○
It provides a great deal of autonomy	○	○	○
Chance for steady progress	○	○	○
Chance for originality	○	○	○
Can make an important contribution to society	○	○	○
Can avoid pressure	○	○	○
Can work with ideas	○	○	○
Can be helpful to others	○	○	○
Have leadership opportunities	○	○	○
Able to work with people I like	○	○	○
Interest in the field	○	○	○
Enjoyed my past experience in this occupation	○	○	○
No more out-of-school training required	○	○	○
Good fringe benefits	○	○	○
Chance to use my training or schooling	○	○	○
Able to work in good physical environment	○	○	○
Chance to learn new skills	○	○	○
Job security	○	○	○
It isn't too difficult to prepare for	○	○	○
The preparation does not involve too many years of education beyond high school	○	○	○
I can get into a program that does not cost too much	○	○	○

29. What do you now consider to be your probable future occupation? (Mark one.)

	Future Occupation
Accountant or auditor	○
Architect or urban planner	○
Business person (management, finance, sales, etc.)	○
Business owner (including farm or ranch)	○
Clergy or religious worker	○
Clerical worker (secretary, stenographer, typist, bookkeeper, etc.)	○
Commercial artist, designer, decorator, draftsman	○
Computer programmer or analyst	○
Construction craftsman, carpenter, electrician, plumber	○
Counselor (guidance, family, school)	○
Driver (truck, taxi, bus)	○
Engineer	○
Factory worker	○
Foreman	○

LIST OF OCCUPATIONS CONTINUED IN NEXT COLUMN

29. (continued)

Farmer, forester, conservationist	○
Government official, administrator, politician	○
Home economist or dietitian	○
Homemaker (full-time)	○
Lawyer or judge	○
Librarian or archivist	○
Law enforcement officer	○
Mathematician, statistician, actuary	○
Mechanic, machinist, repairman	○
Military (career)	○
Nurse	○
Performing artist, musician, entertainer	○
Pharmacist or pharmacologist	○
Physician, surgeon, dentist, optometrist	○
Scientific researcher	○
Service worker: private household (maid, cook, etc.)	○
Social welfare or recreation worker	○
Teacher, professor, administrator (college, university)	○
Teacher or administrator (elementary, secondary)	○
Technician, technologist (health), therapist (physical, occupational, speech)	○
Technician or technologist (other)	○
Veterinarian	○
Writer, journalist, interpreter	○
Other occupation	○
Undecided	○

Questions 30 – 36 are for students who worked (work-study or other employment) while attending school. If you didn't work, please skip to Question 37. If you did work, please answer the following questions for the time you were in school between September 1975 and August 1977.

30. While enrolled in school, how many hours per week did you usually work for pay? (Mark one.)

1–5 hours ○
6–10 hours ○
11–15 hours ○
16–20 hours ○
21–30 hours ○
31–40 hours ○
41 hours or more ○

31. What were your average weekly take-home earnings? (Mark one.)

$1–49 ○
$50–74 ○
$75–99 ○
$100–149 ○
$150 or more ○

32. What type of work did you do? (Mark all that apply.)

Athletic assistant ○
Banking (teller, etc.) ○
Cashier/checker ○
Child care ○
Clerical/secretarial ○
Driver (delivery, chauffeur) ○
Food service worker (food preparation, waiting tables, busing, washing dishes) ○
Government or judiciary aide ○
Grounds or building maintenance (including security) ○
Housework ○
Lab work or technician ○
Library aid ○
Mechanic ○
Musician ○
Research Assistant ○
Sales ○
Social or community aide (include hospital work) ○
Switchboard operator ○
Teaching or tutoring ○
Other semiskilled and unskilled (factory worker, laborer, usher, painter) ○

For Questions 33-36, if you held more than one job, answer for the job you held the longest or for which you worked the most hours.

33. Where did you work? (Mark one for each column.)

	1975-76	1976-77
On campus	○	○
Off campus	○	○

34. How related was your work to your field of study? (Mark one.)

Closely related ○
Somewhat related ○
Not related ○

35. How satisfied were you with the job? (Mark one.)

Very satisfied ○
Somewhat satisfied ○
No opinion ○
Somewhat dissatisfied ○
Very dissatisfied ○

36. Did you receive academic credit for your work? (Mark one.)

Yes ○
No ○

37. What do you expect your annual starting salary to be when you begin working after you complete your education? If you are out of school, indicate the starting salary of your first job after leaving school (if part-time, indicate the full-time equivalent). (Mark one for each column if applicable.)

	Future	First Job After Leaving School
Don't expect to work	○	○
Less than $5,000	○	○
$5,000–7,999	○	○
$8,000–9,999	○	○
$10,000–14,999	○	○
$15,000–19,999	○	○
$20,000–24,999	○	○
$25,000 or more	○	○

38. At the time you expect to graduate and during the next ten years, how good do you think the job market (job openings) will be in your chosen profession? (Mark one most applicable.)

Very good (better than the job market in most other occupations) ○
Good (as good as the job market in most other occupations) ○
Adequate (better than some, worse than others) ○
Poor (worse than most other occupations) ○
Don't know ○

39. If you knew that few jobs would be available in your major area of study, what would you be most likely to do? (Mark one.)

Nothing, it wouldn't make any difference ○
Would take some additional courses in an area where job prospects look promising ○
Would change fields ○
Would plan to take advanced, specialized courses in my field ○
Would drop out of school ○

40. If you are no longer in school, have you worked at any job (including temporary or part-time) since you left school? (Mark one.)

Yes ○
No, but I am looking for work ○
No, and I am not looking for work ○
Not applicable (I am still in school) ○

THANK YOU FOR YOUR HELP IN THIS SURVEY.
PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE
IN THE ENCLOSED POSTAGE-PAID ENVELOPE TO:

365

A National Study of Student Progress
4555 W. 77th Street
Minneapolis, MN 55435

Intran 1307 – SE 710

Cover Letter Sent with Second Wave of 1977 Followup Questionnaire

Higher Education Research Institute, Inc.
924 Westwood Blvd., Suite 850
Los Angeles, California 90024
(213) 475-[illegible]

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October 14, 1977

Hello:

We understand that often it is difficult to take time out from a busy school or work schedule in order to fill out a questionnaire, but your reply is critical to the success of this study. The study is trying to find out how effective the current system of financial aid is in meeting students' financial needs. Each person to whom we are sending this questionnaire has been randomly chosen to reflect a representative cross section, whether or not he or she has ever received financial aid. The information you provide will be completely confidential and will only be used for group comparisons and statistical purposes.

In case you did not receive our first questionnaire or have misplaced it, we are enclosing a second copy and we would very much appreciate your taking some time to complete it. Please use the enclosed postage-paid envelope to return your questionnaire to us. If in the meantime, you have mailed your completed questionnaire, please ignore this request and accept our thanks.

Again, thank you for your participation.

Cordially,

Helen S. Astin

Helen S. Astin
Study Director

Cover Letter Sent with Third Wave of 1977 Followup Questionnaire

Higher Education Research Institute, Inc.
924 Westwood Blvd., Suite 860
Los Angeles, California 90024
(213) 478-6556

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November 18, 1977

Hello!

We take the opportunity of the Thanksgiving holiday to be in touch with you again and ask you to complete the enclosed questionnaire. We thought that perhaps you didn't respond to our previous questionnaires because you were away from home. We hope to have better luck reaching you at home during this holiday time.

The study is trying to find out how effective the current system of financial aid is in meeting students' financial needs. Each person to whom we are sending this questionnaire has been randomly chosen from the students that enrolled in college in 1975, whether or not he or she has ever received financial aid. The information you provide will be very helpful and will be kept completely confidential.

If in the meantime you have mailed your completed questionnaire, just ignore this request and accept our thanks.

Again, thank you and enjoy the holidays.

Cordially,

Helen S. Astin

Helen S. Astin
Project Director

PARENTS: PLEASE FORWARD THIS PACKAGE if your son or daughter is not coming home for Thanksgiving.

APPENDIX B

CREATION OF FINANCIAL AID VARIABLES

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CREATION OF FINANCIAL AID VARIABLES

Two sets of financial aid variables were created, one for the descriptive analysis and one for the regressions. The descriptive analysis used the financial aid question (#22) from the 1977 questionnaire, the one that asked the student how much and what type of aid he or she actually received during his or her first two years of college. Since the student responded with a code number corresponding to the amount of aid he received, this number had to be converted into dollars so that the money could be aggregated (for example, so that all grants could be added to estimate the total amount of grant aid). This was done by converting code 1 (no aid) to 0; code 2 ($1-5000) to $300; code 3 ($501-1,000) to $650; code 4 ($1,001-2,000) to $1,250; code 5 ($2,001-4000) to $2,300; and code 6 (over $4,000) to $4,200.[1] Two types of variables for the descriptive analysis were then created. The first consisted of variables estimating the total amount of aid the student received: the amount of grant money (tuition waivers, BEOGs, SEOGs, local or private scholarships or grants, vocational grants, Bureau of Indian Affairs grants, G.I. benefits, ROTC scholarships or stipends, Social Security dependents' benefits, and other grants). The second consisted of the amount of loan money (Federally Insured Student Loans, National Direct Student Loans and other loans); third was the amount of college work-study funds. Finally, the total amount of financial aid (that is, the sum of the figures to which the codes had been converted) from all of these sources was calculated.

---

[1] The converted amounts were provided to us by the Office of Planning, Budgeting and Evaluation, USOE-DHEW. Research conducted at that office found these figures to be closer to reality than were the midpoints of the categories.

The second type of variables used for descriptive analysis concerned the type of aid students received. Awards were divided into ten mutually exclusive dichotomous variables: grant only; loan only; work-study only; large grant, loan, and work-study; small grant, loan and work-study; large grant and loan; small grant and loan; large grant and work-study; small grant and work-study; and loan and work-study. Aid packages which included a grant were classified according to whether or not the grant accounted for most of the package. Our procedure was to sum the amounts of each type of aid, reaching a grand total. Both the grand total and the portion of it contributed by the grant were then converted back to the original code of 1-6. If these codes were identical for both the grant and the aggregate aid package, then the grant was considered large, but if the code number for total aid was higher than for the grant, the grant was called small. Therefore, "large" and "small" grants refer not to the absolute size of the grant or the aid package but to the grant's proportion of the package.

For the regression analysis, the financial aid variables were developed in the same way from question #18 of the 1975 questionnaire. The only difference is that for 1975 we were unable to include as many types of grants as in 1977 since they were not asked on the 1975 questionnaire. The types of grants inclued were BEOGs, SEOGs, State scholarships or grants, local or private scholarships or grants, G.I. benefits and Social Security Dependent's Benefits.

In all, ten dichotomous aid packaging variables and four amounts of financial aid variables were used.

APPENDIX C

DEVELOPMENT OF PERSISTENCE CATEGORIES

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DEVELOPMENT OF PERSISTENCE CATEGORIES

By using the months September through June to represent an academic year (see Question 1 in the 1977 follow-up questionnaire), we assigned students who indicated they had one pattern of attendance (full-time, part-time or not-in-school) during 8 or more of these 10 months to the appropriate attendance pattern. Students who spent fewer than eight months in particular a pattern were not immediately classified.

Students who could be classified as either in school full-time or part-time or not in school for each of the two years were then further categorized in the following way according to their status during each of those years:

- Students who attended full-time during both years are full-time persisters.
- Students who were enrolled either full-time or part-time but who then dropped out are withdrawals.
- Students who switched from full-time to part-time enrollment are underpersisters.
- Students who attended part-time for both years are part-time persisters.

Most students (N = 12,565) fit into one of the four groups listed above. The remaining students (N = 3056) were classified in basically the same way except that four points in time were considered instead of two. Each academic year was split into two five month periods, September through January and February through June. Students who listed the same attendance pattern in four or more months of a five month period were classified as having that pattern. Students who claimed less than four out of five months of their longest type of enrollment were assigned to a miscellaneous group. A series of cross-tabulations was performed in order to assign these students to categories consistent with those already assigned to the classified students. Additionally, a category for students who failed to respond to the question was established. At this point in the analysis, students were classfied as follows:

	N
• full-time persisters	12,079
• withdrawal	965
• underpersisters	1,489
• part-time persisters	25
• no response or insufficient response	1,063

Next, the student's enrollment status at the time of the follow-up survey as well as the student's degree plans and attainment were taken into consideration in the following ways:

o full-time persisters who were re-enrolled full-time in fall, 1977 remained classified as full-time persisters. Full-time persisters who were not enrolled at the time of the follow-up survey were classified as withdrawals while those who had switched to part-time status were classified as erratic peristers.

o withdrawals who were not enrolled during fall, 1977, remained withdrawals; those who were reenrolled, either part- or full-time were classified as stopouts.

o underpersisters and part-time persisters who were enrolled during fall, 1977 joined the erratic persisters category while those who were not enrolled were classified as withdrawals.

o students who failed to completely answer question 1 were classified as follows:

a. those who left question 1 completely blank remained unclassified.

b. those who indicated being in school for at least one year were classified according to their fall, 1977, enrollment status with students who were enrolled being classified as erratic persisters and those who were not enrolled being classified as withdrawals.

In doing cross-tabluation analysis, it appeared that the erratic persisters category was in fact composed of two groups. Therefore we identified those students who had indicated that they were not enrolled in school during at least one semester but who were enrolled in fall, 1977, and classified them as stopouts. Those who had not indicated being unenrolled at any time remained erratic persisters. Therefore, one should note that the least is known about the erratic persister group since it includes those students with some missing information from question 1 (although students who failed to respond about their enrollment status for at least one year are not included in the persistence category; they remain unclassified). Some of these students may therefore be either full-time persisters or stopouts.

Finally, we felt that students who in 1975 indicated that they planned to earn an A.A. degree and did earn that degree could not reasonably be called withdrawals. Therefore, we classified those students who both planned for and received an A.A. degree and who were not reenrolled, as A.A. persisters. Those who earned an A.A. degree but were reenrolled were classified in one of the other persistence categories depending upon their enrollment behavior.

The final persistence categories which emerged are as follows:

Persistence Categories

	N
full-time persister	10,867
erratic persister	1,512
stopout	606
withdrawal	1,619
A.A. persister	152
unclassified	856

APPENDIX D

A VERIFICATION STUDY OF FINANCIAL AID DATA REPORTED BY STUDENTS

APPENDIX D

A VERIFICATION STUDY OF FINANCIAL AID DATA REPORTED BY STUDENTS

The type and amount of aid students received in the two academic years after they enrolled in college were some of the most important types of information we collected for this study. To ensure the accuracy of our survey research findings, we designed a study comparing student self-reports with institutionally maintained data on student financial aid.

We particularly wanted to know how much aid students received from each of twenty-four different funding sources for the academic years 1975-76 and 1976-77 (see question 22, 1977 survey, Appendix A). Table 1 reports the raw, unedited data for the 16,191 students who answered this question. In order to verify these figures, we asked several schools in the Los Angeles area to give us the financial aid records of their students who had responded to our survey. Three institutions gave us access to these records: California Institute of Technology (Caltech), the University of California at Los Angeles (UCLA), and Los Angeles City College (LACC). Two of these schools are public, and one is independent; one has stringent entrance requirements, one is moderately selective, and one unselective.

Since a number of sources of funding (for example, parents, part-time work, and savings) are impossible to corroborate from institutional records, not all types of aid could be verified. Sources of money we could verify were Basic Opportunity Grants (BEOGs), Supplemental Educational Opportunity Grants (SEOGs), state scholarships or grants, local or private scholarships or grants, Federally Guaranteed Student Loans (FISLs or GSLPs), National Direct Student Loans (NDSLs), college work-study and Social Security dependent's benefits. We did not attempt to verify State Scholarship Incentive Grants, vocational grants, and Bureau of Indian Affairs Grants since virtually no students reported receiving such aid.

The institutional data were coded to correspond with the dollar amounts listed in the questionnaire: none, $1-499, $500-999, and so on. After we obtained the data from the institutional files we merged them with the student-reported data. "Accuracy variables" for each type of aid for both academic years were created by comparing the amount of a particular type of aid reported by the student with the amount listed in the institutional files. If the two records matched, the variable was coded "accurate"; if the institution reported that the student received aid outside the range of the aid categories, for example, if the student claimed to be getting $750 per year, but institutional records showed s/he actually was receiving less than $500 or more than $999, the variable was coded "inaccurate."

The verification sample for 1975-76 was composed of records from 772 students: 579 from UCLA, 153 from LACC, and 40 from Caltech. Financial aid informaiton from 1976-77 was based on an N of 732, since some students dropped out of school before their second year. The analyses reported in Tables 2-8 include only the students who were listed by their institutions as aid recipients and who also responded to our survey (N = 284 in 1975-76 and N = 219 in 1976-77).

When the financial aid records from these institutions were examined, a number of problems became apparent, of which the most serious was that their financial aid offices kept records only on students who received financial aid -- thus students not listed in these institutional records were necessarily coded as getting no aid. Furthermore, since we had only the students' names and not their social security numbers, we sometimes found it difficult to identify and match students. Names might be spelled wrong due to keypunching errors made when the data were collected in 1975; students might have married and changed their names; some might have transferred to another school and be receiving aid from that school, and students might be confused with other students having identical names. Except for students having identical names, all these situations could result in the institutional records showing that a student had received no aid when in reality he or she had received it.

Other problems arose when we tried to estimate the amount of aid students received. First, most types of aid could be "awarded" simply as tuition waivers. When this was done, we were uncertain whether to classify the award by its source or as a tuition waiver. In most cases, we classified it as aid of one sort or another, not as a tuition waiver. Second, sometimes it was unclear whether aid should be "credited" to the state or the student's school, especially for UCLA where much of the aid awarded by the institution actually comes from state funds. We decided that money awarded by a college, such as grants-in-aid or Regents' scholarships, should be counted as local, not state aid. In view of these two subjective classification decisions, our institutional data must be viewed with some caution.

Results

The following tables present our findings first for all students, whether or not they had financial aid, and then for only those students receiving aid. They reveal the accuracy with which students reported the amounts and types of aid they received and the percentage of students who overestimated the amount of aid they received, underestimated it, or reported it correctly. Separate analyses were done for men, women, whites, non-whites, students whose parents earned various levels of income and all students combined. Tables 2 through 5 report what proportion of all students accurately recorded the amount and types of aid they received. As a group, students were quite accurate in reporting the amount of aid they received. They were correct 84-97 percent of the time for all types of aid except local or private scholarships and grants, on which they were right about 80 percent of the time.

Students whose parents had relatively low incomes made more mistakes than those whose parents were more affluent, although the former received more aid from more sources and so, like black students who received more aid, had more room for error. Table 6 compares the number of students who reported receiving aid with those listed in institutional files, revealing that more students actually received aid than college records indicate. Table 7 shows the proportion of students who reported the various types of aid they received, and its amount, correctly. Students are more accurate concerning the loans they received than their BEOGs (95% of all students correctly listed the type and amount of their loan, as opposed to only 82% who accurately reported their BEOG and the amount of money they received from it). However, Table 8 shows that students overwhelmingly knew from what sources they had received aid and were uncertain only about its amount -- 94% of the students in 1975-76 and 96% of the students in 1976-77 accurately reported that they had received BEOGs.

White and non-white students were about equally accurate so far as what types of financial aid they received (Table 9), as were students who came from different economic backgrounds (Table 10). Tables 11, 12, and 13 show how accurately students reported the amount of aid they received. Each table indicates how many underestimated it, overestimated it and were accurate. Students tended to overestimate their aid, except for money that came from SEOGs and local or private scholarships.

In addition to analyzing their responses to question 22, we also examined the accuracy of students' answers to question 23, in which they indicated the aid they received under three general categories: grants, loans, and work-study. (For this analysis, tuition waivers, BEOGs, state, local and private scholarships and Social Security dependent's benefits from the institutional records were all grouped together as "grants.") For 1975-76, 93.1 percent of the students gave accurate information about their grants, 90.1 percent about their loans and 93.5 percent about their work-study awards. For 1976-77, the results were quite similar, with 91.1 percent (grants) 92.6 percent (loans) and 89.8 percent (work-study) describing their awards accurately.

We also attempted to cross-validate the expenses students claimed they had (see question 21, 1977 questionnaire). We calculated their self-reported college costs by averaging the amounts they listed for tuition and fees, books and supplies, food, housing, commuting to school, medical and dental expenses and miscellaneous costs; we then compared these figures to the published figures on costs from the institutions. Caltech students estimated their expenses to be $5725, compared with their institution's estimate of $6350. UCLA students said they spent an average of $3210; UCLA itself estimates costs as $2450, without, however, taking into consideration the added expense of out-of-state tuition. Los Angeles Community College students said they spent about $2450, but the school listed no average expenses as a basis of comparison.

This brief study shows that student self-reports on the type and cost of the aid they receive are generally quite accurate. Only about 15 percent of them gave wrong information, an impressively small percentage considering how detailed and complex was the information they were asked to supply.

TABLE 1

Percentage of Students Reporting Various Types and Amounts of Financial Aid

	1975-76						1976-77					
Type of Aid	None	$1 - 499	$500 -999	$1000 -1999	$2000 -4000	Over $4000	None	$1- 499	$500 -999	$1000 -1999	$2000 -4000	Over $4000
Tuition waiver	61	3	2	2	2	1	57	3	2	2	1	0
Parental Family Aid or Gifts	20	21	9	12	17	10	21	18	8	10	15	9
Grants or Scholarships:												
Basic Educational Opportunity Grant (BEOG)	44	7	13	13	1	0	42	6	11	11	0	0
Supplemental Educational Opportunity Grant (SEOG)	60	5	4	1	0	0	56	4	3	1	0	0
State Scholarship or Grant	51	9	7	5	1	0	48	8	6	4	1	0
State Scholarship Incentive Grant (SSIG)	67	1	0	0	0	0	62	1	0	0	0	0
Local or Private Scholarship or Grant	52	9	5	4	2	0.3	52	5	4	3	2	0
Vocational Grant	65	0	0	0	0	0	60	0	0	0	0	0
Bureau of Indian Affairs Grant (BIA)	67	0	0	0	0	0	62	0	0	0	0	0
Other	58	3	2	1	1	1	55	2	1	1	0.5	0
Loans:												
Federally Guaranteed Student Loans (FISL or GSLP)	62	1	1	3	1	0	57	1	1	3	1	0
National Direct Student Loan (NDSL)	51	7	8	5	0	0	49	5	6	4	1	0
Other	58	1	1	2	1	0	54	1	1	2	1	0
Work												
College Work-study	52	10	8	1	0	0	46	9	7	2	0	0
Full-time Work	61	1	1	1	1	1	54	1	1	1	1	1
Part-time or Summer Work	20	23	21	14	4	1	18	20	19	14	5	1
Savings	35	25	8	4	1	0	34	22	6	3	1	0
Spouse's Income	65	0	0	0	0	0	59	0	0	0	0	0
G.I. Benefits (including Veterans' Dependent's Benefits)	65	1	1	0	1	0	60	1	1	0	1	0
ROTC Scholarship or Stipend	66	0	0	0	0	0	60	0	0	0	0	0

(Continued on next page)

TABLE 1 (continued)

	1975-76						1976-77					
Type of Aid	None	$1-499	$500-999	$1000-1999	$2000-4000	Over $4000	None	$1-499	$500-999	$1000-1999	$2000-4000	Over $4000
Social Security Dependents Benefits	59	3	2	3	2	0	54	3	2	3	2	0
Aid for Families with Dependent Children (AFDC)	66	0	0	0	0	0	61	0	0	0	0	0
Food Stamps	66	1	0	0	0	0	61	1	0	0	0	0
Other	63	1	0	0	0	0	71	3	2	2	2	1

(N = 16,191)

Note - Percentages do not sum to 100 because non-respondents have been omitted. However, when the data are edited, those students who claimed some but not all types of aid were coded as having no aid in the categories for which they claimed no aid. The figures above are based on the unweighted sample of respondents.

Table 2

Institutional Differences in the Percentage of All Students Reporting Their Types and Amount of Aid Accurately

Type of Aid	Total	Caltech	UCLA	LACC
1975-76				
BEOG	84.1%	87.5%	86.4%	74.5%
SEOG	90.1	92.5	87.9	97.7
State Scholarship and Grant	84.3	87.5	82.4	90.8
Local or Private Scholarship and Grant	79.5	65.0	75.8	97.4
FISL or GSLP	97.2	95.0	96.7	99.3
NDSL	90.5	80.0	89.6	96.7
College Work-study	94.3	97.5	94.3	93.5
Social Security Dependent's Benefits	94.0	92.5	94.6	92.2
N	772	40	579	153
1976-77				
BEOG	85.8	95.0	88.4	72.0
SEOG	93.7	90.0	93.0	97.7
State Scholarship and Grant	86.3	85.0	85.9	88.6
Local or Private Scholarship and Grant	86.3	80.0	84.3	97.0
FISL or GSLP	97.3	87.5	97.9	97.7
NDSL	92.8	90.0	92.5	94.7
College Work-study	92.8	75.0	95.4	87.1
Social Security Dependent's Benefits	92.5	92.5	92.9	90.9
N	732	40	560	132

TABLE 3

Sex Differences in the Percentage of All Students Reporting their Types and Amount of Aid Accurately

Type of Aid	Men	Women
1975-76		
BEOG	83.9	84.2
SEOG	89.1	90.7
State Scholarship and Grant	87.0	82.4
Local or Private Scholarship and Grant	79.7	79.4
FISL or GSLP	96.4	97.7
NDSL	90.9	90.3
College Work-study	96.4	92.8
Social Security Dependent's Benefits	94.2	93.9
N	330	442
1976-77		
BEOG	87.1	84.8
SEOG	91.6	95.3
State Scholarship and Grant	87.1	85.8
Local or Private Scholarship and Grant	85.8	86.7
FISL or GSLP	96.5	97.9
NDSL	92.6	92.9
College Work-study	92.3	93.1
Social Security Dependent's Benefits	92.6	92.4
N	310	422

TABLE 4

Racial Differences in the Percentage of All Students Reporting their Types and Amount of Aid Accurately

Types of Aid	White	Black	American Indian	Asian	Chicano
1975-76					
BEOG	90.0	71.4	64.3	87.7	67.2
SEOG	92.0	91.6	78.6	92.0	69.0
State Scholarship and Grant	88.0	86.6	92.9	81.9	70.7
Local or Private Scholarship or Grant	82.7	87.4	78.6	72.8	81.0
FISL or GSLP	97.3	96.6	92.9	97.8	94.8
NDSL	92.3	88.2	92.9	89.5	89.7
College Work- study	97.0	90.8	100.0	93.8	89.7
Social Security Dependent's Benefits	93.3	94.1	85.7	95.3	93.1
N	300	119	14	276	58
1976-77					
BEOG	92.1	69.6	78.6	89.9	65.3
SEOG	94.1	94.1	92.9	93.3	92.5
State Scholarship and Grant	88.6	91.2	100.0	83.2	75.5
Local or Private Scholarship or Grant	89.0	85.3	85.7	84.7	83.0
FISL or GSLP	96.6	98.0	100.0	98.1	94.3
NDSL	93.1	91.2	100.0	94.4	83.0
College Work- study	94.8	90.2	100.0	92.5	86.8
Social Security Dependent's Benefits	92.1	91.2	85.7	94.4	88.7
N	290	102	14	268	53

TABLE 5

Percentage of All Students Reporting their Types and Amount of Aid Accurately, by Parental Income

Type of Aid	Less than $8000	$8000-9999	$10000-14999	$15000-19999	$20000-29999	$30000 or More
1975-76						
BEOG	64.5	72.1	76.9	97.1	96.8	100.0
SEOG	75.9	80.3	89.6	93.3	98.4	100.0
State Scholarship and Grant	75.3	75.4	80.6	89.4	89.6	98.8
Local or Private Scholarship or Grant	80.7	75.4	77.6	65.4	76.0	93.8
FISL or GSLP	96.4	93.4	96.3	97.1	97.6	100.0
NDSL	83.7	82.0	90.3	91.3	94.4	100.0
College Work-study	91.6	96.7	94.8	86.5	96.8	100.0
Social Security Dependent's Benefits	89.2	86.9	94.8	100.0	98.4	93.8
N	166	61	134	104	125	80
1976-77						
BEOG	63.0	71.7	85.8	96.0	97.5	100.0
SEOG	91.6	78.3	92.1	93.1	99.2	100.0
State Scholarship and Grant	77.3	71.7	78.0	92.1	95.0	98.7
Local or Private Scholarship or Grant	81.8	81.7	83.5	77.2	90.8	98.7
FISL or GSLP	96.8	95.0	98.4	94.1	98.3	100.0
NDSL	87.7	88.3	89.8	92.1	99.2	100.0
College Work-study	90.9	90.0	91.3	88.1	96.6	98.7
Social Security Dependent's Benefits	85.7	86.7	93.7	100.0	95.8	93.4
N	154	60	127	101	119	76

TABLE 6

Types and Amount of Aid Received as Reported by Students and Institutions
(Percentages)

	No Aid		$1- 499		$500-999		$1000-1999		$2000-4000	
Type of Aid	Student Reported	Inst. Reported	Student Reported	Inst. Reported	Student Reported	Inst. Reported	Student Reported	Inst. Reported	Student Reported	Inst. Reported
1975-76 (N=772)										
BEOG	70.5	79.8	6.5	4.5	11.3	7.8	11.8	7.9		
SEOG	91.3	88.6	4.5	6.0	3.4	4.5	0.8	0.9		
State Scholarship and Grant	66.7	75.9	2.3	1.7	26.6	20.[illegible]	2.5		1.9	1.7
Local or Private Scholarship and Grant	78.8	83.0	14.1	10.1	4.7	3.8	1.7	2.3	0.8	0.8
FISL or GSLP	97.0	99.7	1.6		0.4	0.1	1.0	0.1		
NDSL	81.2	84.3	11.8	10.1	4.5	2.8	2.3	2.7	0.1	
College Work-study	91.8	95.9	2.3	1.2	4.4	2.6	1.3	0.4	0.1	
Social Security Dependent's Benefits	97.2	97.7	1.8	0.3	2.1	0.8	2.3	1.3	1.0	
1976-77										
BEOG	73.2	81.7	4.9	4.1	11.9	7.4	9.8	6.8	0.1	
SEOG	93.7	93.2	3.1	2.6	2.7	3.4	0.4	0.8		
State Scholarship and Grant	70.4	78.6	4.2	1.4	19.1	15.2	4.1	3.7	2.2	1.2
Local or Private Scholarship and Grant	90.3	87.0	5.3	8.5	2.7	3.4	1.4	0.8	0.3	0.3
FISL or GSLP	96.4	97.7	0.7		0.7	0.7	2.2	1.6		
NDSL	86.6	90.2	8.9	8.2	3.1	0.8	1.1	0.8	0.3	
College Work-study	91.4	95.5	2.9	0.3	4.2	2.3	1.5	1.9		
Social Security Dependent's Benefits	91.5	97.5	2.0	0.5	2.5	0.3	2.9	1.6	1.1	

TABLE 7

Percentage of Students With Aid Reporting Their Types and Amount of Aid Accurately

Type of Aid	1975-76	1976-77
BEOG	82.0%	82.6%
SEOG	78.9	83.6
State Scholarship and Grant	83.1	84.0
Local or Private Scholarship and Grant	68.0	65.3
FISL or GSLP	95.1	95.4
NDSL	84.9	86.8
College Work-study	91.2	88.6
Social Security Dependent's Benefits	91.2	88.6
N	284	219

TABLE 8

Percentage of Students With Aid Reporting Their Types of Aid Accurately

Type of Aid	1975-76	1976-77
BEOG	94.4%	96.3%
SEOG	84.5	88.1
State Scholarship and Grant	89.5	93.2
Local or Private Scholarship and Grant	76.8	71.7
FISL or GSLP	94.3	95.9
NDSL	90.2	91.8
College Work-study	95.1	91.8
Social Security Dependent's Benefits	94.1	93.7
N	284	219

Note - In this Table and on Tables 9 and 10 only the accuracy in the type of aid is reported, independent of amount.

TABLE 9

Percentage of Students With Aid Reporting Their Types of Aid Accurately, by Race

Type of Aid	White	Non-white
1975-76		
BEOG	95.2%	94.0%
SEOG	81.0	86.0
State Scholarship and Grant	89.3	89.5
Local or Private Scholarship and Grant	81.0	75.0
FISL or GSLP	95.2	95.5
NDSL	88.1	91.0
College Work-study	94.1	95.5
Social Security Dependent's Benefits	94.1	94.0
N	84	200
1976-77		
BEOG	97.0	96.1
SEOG	81.8	90.9
State Scholarship and Grant	89.4	94.8
Local or Private Scholarship and Grant	77.3	69.3
FISL or GSLP	92.5	97.4
NDSL	89.4	92.8
College Work-study	89.4	93.9
Social Security Dependent's Benefits	90.9	94.8
N	66	153

TABLE 10

Percentage of Students With Aid Reporting Their Types of Aid Accurately, by Parental Income

Type of Aid	Less than $10,000	$10,000-19,999	$20,000 or more
1975-76			
BEOG	97.1	92.2	95.4
SEOG	77.9	91.3	90.1
State Scholarship and Grant	87.1	96.1	86.4
Local or Private Scholarship and Grant	81.4	70.0	77.3
FISL or GSLP	96.4	95.1	90.9
NDSL	90.0	94.2	77.3
College Work-study	95.0	96.1	95.4
Social Security Dependent's Benefits	90.7	99.1	95.4
N	140	103	22
1976-77			
BEOG	97.4	95.0	100
SEOG	88.6	86.2	91.7
State Scholarship and Grant	93.0	93.7	91.7
Local or Private Scholarship and Grant	74.6	65.0	83.3
FISL or GSLP	96.5	96.2	100
NDSL	89.5	93.3	100
College Work-study	93.9	90.0	100
Social Security Dependent's Benefits	91.2	97.5	100
N	114	80	12

TABLE 11

Percentage of Students Reporting Their Amount of Aid Accurately

Type of Aid	Percent Accurate	Percent Underestimating Aid	Percent Overestimating Aid	N
1975-76				
BEOG	76.4	9.5	14.2	148
SEOG	66.0	25.5	8.5	47
State Scholarship and Grant	89.4	2.4	8.2	170
Local or Private Scholarship and Grant	69.1	18.5	12.4	81
FISL or GSLP	50.0	0	50.0	2
NDSL	85/6	5.8	7.7	104
College Work-study	64.5	12.9	22.5	31
Social Security Dependent's Benefits	55.6	22.2	22.2	18
1976-77				
BEOG	76.6	8.6	14.8	128
SEOG	66/7	23.3	10.0	30
State Scholarship and Grant	86.4	9.5	4.1	147
Local or Private Scholarship and Grant	65.0	20.0	15.0	40
FISL or GSLP	91.7	8.3	0	12
NDSL	82.8	1.6	15.6	64
College Work-study	72.0	24.0	4.0	25
Social Security Dependent's Benefits	38.9	27.8	33.3	18

Note - In this Table and in Tables 12 and 13 the percent accuracy is based on amount only, not taking into account type accuracy.

TABLE 12

Percentage of Students with Aid Reporting their Amount of Aid Accurately, by Race

	Percent Accurate		Percent Underestimating		Percent Overestimating		N[a]	
Type of Aid	White	Non-white	White	Non-white	White	Non-white	White	Non-white
1975-76								
BEOG	75.8	76.5	10.3	9.2	13.8	14.3	29	119
SEOG	66.7	65.5	22.2	27.6	11.1	6.9	18	29
State Scholarship and Grant	88.9	89.7	3.7	1.7	7.4	8.6	54	116
Local or Private Scholarship and Grant	74.4	64.3	12.8	23.8	12.8	11.9	39	42
FISL or GSLP	*	*					1	1
NDSL	85.7	85.5	4.8	6.5	9.5	8.1	42	62
College Work-study	84.6	50.0	0	22.2	15.4	27.8	13	18
Social Security Dependent's Benefits	50.0	60.0	25.0	20.0	25.0	20.0	8	10
1976-77								
BEOG	74.1	77.2	3.7	9.9	22.2	12.9	27	101
SEOG	78.6	56.3	14.3	31.3	7.1	12.5	14	16
State Scholarship and Grant	84.4	87.3	6.7	10.8	8.9	2.0	45	102
Local or Private Scholarship and Grant	65.2	64.7	17.4	23.5	17.4	11.8	23	17
FISL or GSLP	*	*					6	6
NDSL	76.9	86.8	0	2.6	23.1	10.5	26	38
College Work-study	72.7	75.0	18.2	12.5	9.1	12.5	11	8
Social Security Dependent's Benefits	40.0	37.5	20.0	37.5	40.0	23.0	10	8

[a] N based on aided students who reported their type of aid correctly.

[*] N too small to report percentages.

TABLE 13

Percentage of Students with Aid Reporting Their Amount of Aid Accurately, by Parental Income

Type of Aid	Percent Accurate Less than $10,000	 $10,000-20,000	Percent Underestimating Less than $10,000	 $10,000-20,000	Percent Overestimating Less than $10,000	 $10,000-20,000	N[b] Less than $10,000	 $10,000-20,000
1975-76								
BEOG	76.6	75.0	12.2	3.1	11.2	21.9	107	32
SEOG	71.0	61.5	22.6	33.3	6.5	13.3	31	15
State Scholarship and Grant	89.0	93.5	1.2	2.6	9.8	2.9	82	77
Local or Private Scholarship and Grant	81.3	67.6	6.3	31.3	12.5	6.2	32	37
FISL or GSLP	*	*	*	*	*	*	0	1
NDSL	82.7	87.8	5.8	4.9	11.5	7.3	52	41
College Work-study	88.9	47.1	11.1	17.7	0	35.3	9	17
Social Security Dependent's Benefits	69.2	*	15.4	*	15.4	*	13	3
1976-77								
BEOG	72.5	89.3	11.0	3.6	16.5	7.2	91	28
SEOG	66.7	66.7	20.8	33.3	12.5	0	24	6
State Scholarship and Grant	80.8	91.8	14.1	4.9	5.1	3.3	78	61
Local or Private Scholarship and Grant	66.7	52.9	13.3	35.3	20.0	11.8	15	17
FISL or GSLP	100.0	80.0	0	20.0	0	0	5	3
NDSL	87.5	76.9	0	0	12.5	23.1	32	26
College Work-study	75.0	68.8	12.5	31.3	12.5	0	8	16
Social Security Dependent's Benefits	53.9	*	23.1	*	23.1	*	13	2

[a] There were not enough students with parental incomes over $20,000 who received aid to report percentages. In 1975-1976, most of these received local or private scholarships (N = 10), with four students reporting their amount of aid accurately, three underestimating and three overestimating it. For 1976-1977, six students whose parents earned more than $20,000 won local or private scholarships and five received state scholarships. All but one of these students reported their amount of aid accurating.

[b] N based on students with aid who reported their type of aid accurately.

* N too small to report percentages.

APPENDIX E

VARIABLES USED IN REGRESSION ANALYSES

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To examine the impact of financial aid on student persistence, we designed and ran stepwise regression analyses separately for each of the major subpopulations of students (whites whose parents' income was under $10,000; whites whose parents' income was over $10,000; white men; white women; all blacks; blacks in predominantly white colleges; blacks in predominantly black colleges; Puerto Ricans; Asian Americans; American Indians; and Chicanos).

In order to identify the appropriate predictors and the order in which they should enter the equation, we first examined a 10 percent unweighted subsample of all the students, using all the personal variables. From these results we were able to reduce the number of variables significantly. We repeated the analysis using the environmental variables in order to reduce these as well. All financial aid variables were retained.

For the analyses with this 10 percent subsample we identified the input variables based on information provided by students when they entered college in 1975 (i.e., students' high school experiences, race, religious background, degree expectations, marital status and demographic characteristics such as their parents' income and education). Information on how the student expected to fare during and after college was also selected from the 1975 questionnaire. Students' residence plans while in college were also taken from responses to the 1975 questionnaire (these plans were listed among the environmental variables).

Extensive work was undertaken with the financial aid variables in order to avoid artifacts. Having financial aid, particularly during the student's sophomore year, was highly correlated with persistence since the students who received financial aid in their sophomore year had to remain in school. Therefore, having financial aid involved their having persisted. Thus, we used question #18 from the 1975 questionnaire which asked the student what his or her finanical aid award was going to be. A number of variables were developed from this question: whether the student had aid or not; the estimated amount of that aid (see Appendix B for complete details) and the form in which that aid was awarded (whether from a single source or in a package).

Institutional and environmental variables were derived from the Higher Education General Information Survey as well as from information provided by students in 1977 describing where and how many hours a week they were employed while in college. The student's freshman year residence was also considered an environmental variable and was obtained from the 1975 questionnaire rather than the 1977 one in order to avoid possible artifacts similar to those with the financial aid item.

Another set of variables was developed from the 1977 follow-up; it included college grades and self-ratings on academic ability and motivation to achieve, work values, reasons for going to college, college experiences and the student's financial situation.

Therefore, we used four sets of variables in all: a) students' personal and demographic characteristics; b) their college environments and work experiences; c) their means of financing college including the type and amount of aid they were awarded; and d) their college experiences, values, attitudes and financial situation.

We also developed three interaction terms: student's marital status x age, student's SAT score x institutional selectivity; and student's amount of aid x college tuition and fees. The scoring for all variables is described below.

For each subpopulation, we first examined the students who persisted full time against students in the other persistence categories (erratic, stopout and withdrawal) and second, we compared those who had withdrawn to all other groups combined.

For each analysis, the personal variables were entered first, followed by the environmental, financial aid, and college experience/attitude variables, in that order. The fourth set of variables was divided into two groups: those that appeared most resistent and those that were least resistent to bias resulting from the student's 1977 enrollment status. Within each grouping, variables were allowed to enter freely based on their significant relationship to the criterion.

INDEPENDENT VARIABLES

I. Background and personal variables

Sources of data
1975 Questionnaire

Question #	
1	Sex (1=male, 2=female)
3	Age (1= 16 or less, 2= 17, 3= 18, 5= 20, 6= 21, 7=22+)
5	High School Preparation (college prep. = 2)
6	High School Grades (1 = D...8 = A)
21	Marital status in 1975 (Married = 2, all others = 1)
24	1975 Degree Plans (6 dichotomous variables: B.A., M.A., Ph.D., Ll.B., M.D., Divinity Degree)
26	Race (5 dichotomous variables: White, Black, American Indian, Chicano, Puerto Rican)
27	Concern about financing education (1 = none...3 = major)
29	Parental income (1 = less than $3,000...14 = $50,000 or more)
30	Father's education Mother's education (1 = grammar school or less.... 8 = graduate degree)
32	Religion (4 dichotomous variables: Jewish, Catholic, Protestant, No religion)
36	Expectations (1 = no chance...4 = very good chance)

1. make at least a B average
2. have to work at an outside job
3. get a B.A.
4. drop out permanently
5. seek counseling on personal problems
6. be satisfied with college
7. get married while in college

Sources of Data

ETS, ACT	SAT score (combined verbal and math score)[1]

1975 Questionnaire
Question #

	Interaction term[2]
3, 21	Marital status in 1975 x age

II. Institutional and Environmental Variables[3]

HEGIS	Size of Student body (1 = less than 250...9 = 20,000+)
HEGIS	Selectivity (mean SAT/ACT scores of students in the institution)
HEGIS	Distance from home in miles
HEGIS	Type of control (1 = public; 2 = private)
HEGIS	Level of degree offered (2 dichotomous variables: University =2; Four-Year College = 2)
HEGIS	Region of country (3 dichotomous variables: East, Central, West)
HEGIS	Tuition and fees

1975 Questionnaire

25	Residence (2 dichotomous variables: Plan to live on campus, plan to live off campus but not with parents)

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[1] The students' SAT and ACT scores were obtained from the College Entrance Examination Board and the American College Testing Program, respectively. These scores were converted to a common scale represented in units comparable to SAT (Astin, 1971).

[2] The interaction terms were developed by multiplying the student's standardized score of the two variables.

[3] The institutional variables were abstracted from data collected by the Higher Education General Information Survey in 1973. Tuition and fees came from the 1975 HEGIS.

Sources of Data

1977 Questionnaire

Question #	
30	Employment while in college
33	Location (2 dichotomous variables: worked on campus, worked off campus)
30	Hours worked (3 dichotomous variables: 21 hours or more per week, 11-20 hours, 10 hours or less)
34	Relatedness of work to field of study

Interaction Term

SAT x selectivity of institution

1975 Questionnaire

III. Financial Aid Variables[4]

Question #	
18	Had aid = 2; no aid = 1
18	Parental contribution (yes = 2)
18	Total amount of aid
18	Total grant amount
18	Total loan amount
18	Total work-study amount
18	Type of aid (10 dichotomous variables): Grant only Loan only Work-study only Loan and work-study Large grant and loan and work-study Large grant and loan Large grant and work-study Small grant and loan and work-study Small grant and loan Small grant and work-study

Net Price: tuition and fees minus grants[5]

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[4] For a detailed description of the creation of the financial aid variables, see Appendix B.

[5] Tuition and fees were from HEGIS and grants from the 1975 questionnaire.

Sources of Data

Interaction term

Amount of financial aid x tuition and fees

IV. Experiences and Behavior While in College[6]

1977 Questionnaire

1st Phase

Question #	
5	College Grades (A = 8; A-/B+ = 7; Pass, N.A. = 6; B-/C+ = 5; C = 4; C-/D+ = 3; D = 2; Less than D, Fail = 1)
8	Financial situation (3 dichotomous variables) 1. I have major expenses or debts. 2. I contribute to the support of my parents 3. Head of household/single parent
10	Parents able to finance college education of siblings (No = 2; Yes, N.A. = 1)
20	Self-ratings: Academic ability; Motivation to achieve (above average = 3...below average = 1)
28	Work values for long-term career (very important = 3 ...not important = 1) 1. Good pay 2. Can be helpful to others 3. Chance to use my training or schooling

---

[6] The experiences and behavior while in college were entered in 2 phases. Phase I included variables that could not necessarily have been affected by the student's persistence status while Phase II included responses more likely to have been biased by the student's academic status.

Sources of Data

2nd phase

Question #

8 Financial situation (2 dichotomous variables)
  1. Parents have low income and cannot help with my college expenses.
  2. Parents are not willing to help pay for my college expenses.

12 Reasons for going to college (4 dichotomous variables)
  1. Contribute more to my community
  2. Make more money
  3. Gain a general education and appreciation of ideas
  4. Meet new and interesting people

13 Experiences in college
  1. Felt bored much of the time
  2. Felt lonely much of the time
  3. Involvement scale created by summing the following items: (2 = yes; 0, 1 = no)

Participated in a play or entered an art competition
Participated in intercollegiate or intramural sports
Worked on school paper, yearbook...
Elected to scholastic honor society
Participated in student government
Joined fraternity/sorority
Participated in special interest clubs
Participated in student religious organization
Was a guest in teacher's or administrator's home
Called teacher by first name
Studied with other students
Tutored another student
Voted in student election
Sang in choir or glee club or ...
Participated in student demonstrations

14 Disatisfaction scale created by summing the items in the question (not satisfied = 2; satisfied, N.A. = 1)

Sources of Data

Question #

15 College environments[7] (percentage of students responding "yes" at each institution)

1. Students are under a great deal of pressure to get high grades.
2. There is a great deal of conformity among students.
3. Classes are usually informal.
4. Social activities are overemphasized.
5. There is little or no contact with teachers.

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[7] This variable used only in the analysis with white students.